

Andrea Celentano Curriculum Vitae

Il sottoscritto Andrea Celentano, nato a Genova (GE) il 05/05/1986, c.f. CLNNDR86E05D969P e residente a Genova (GE), in Via Castagnola n.20, consapevole delle responsabilità penale prevista, dall'art. 76 del D.P.R. 445/2000, per le ipotesi di falsità in atti e dichiarazioni mendaci ivi indicate:

DICHIARA

che le informazioni sotto riportate sono veritiere.

Dr. Andrea Celentano
PhD in Physics, Genoa University, March 2014

1 Personal Data

Birth date and place: OMISSIS
Fiscal code: OMISSIS
Citizenship: Italian
Home address: OMISSIS
Telephone: OMISSIS
OMISSIS
Email: andrea.celentano@ge.infn.it
ORCID: orcid.org/0000-0002-7104-2983

2 Current and previous positions

- 2024-now: Permanent staff researcher (II level) at INFN, Sezione di Genova. Winner of INFN 26076/2023 selection, *second classified*.
Research interests: nuclear and subnuclear particle physics (hadron physics and light dark matter search at accelerators). Design, construction, and execution of small- and medium-scale experiments at accelerators.
- 2024-now: Adjoint professor, Genova University, Physics department.
- 2017-2024: Permanent staff researcher (III level) at INFN, Sezione di Genova. Winner of INFN 128221/2016 selection, *first classified out of 717 participants*.
- 20218-2022: Adjoint professor, Genova University, Mechanical and Naval Engineering department.
- 2014-2016: PostDoc at INFN-Genova.

3 Education

March 2014: PhD in Physics, University of Genoa.

Thesis title: “The Forward Tagger detector for the CLAS12 experiment at Jefferson Laboratory and the MesonEx experiment”

Advisor: Prof. Mauro Taiuti, Dott. Marco Battaglieri

External Advisor: Prof. Adam Szczepaniak

October 2010: M. Sc. in Physics, University of Genoa.

Thesis title: “Neutron production from a thick Berillium target”

Advisor: Prof. Giovanni Ricco, Dott. Marco Ripani

External Advisor: Dott. Maurizio Lo Vetere
Final grade: 110/110 cum laude

4 Current and previous positions

- 2017-Current: Permanent staff researcher at INFN-Genova, Gruppo 3
 - Winner of INFN 18221/2016 national selection
- 2015-2016: Post-doctoral researcher at INFN-Genova, Gruppo 5, Optotracker project
- 2014: Post-doctoral researcher at INFN-Genova, Gruppo 3, EU-FP7 HP3 project

5 Research statement summary

I began my scientific activity in the field of hadronic spectroscopy, an experimental tool used to investigate the mechanism by which nucleons acquire mass from their nearly massless constituents—quarks and gluons. Subsequently, I diversified my research interests by entering the field of light dark matter (LDM) searches with accelerator-based experiments, which today represents my main scientific activity. Working in small- and medium-scale experiments has allowed me to engage with all aspects of a particle physics experiment, from design to execution to final data analysis. My experience in these fields is also demonstrated by my scientific achievements (publications and invited talks), leadership roles, and ability to attract external funding.

My activity in the field of hadronic physics has been ongoing since 2011 within the CLAS and CLAS12-MesonEx experiments at Jefferson Laboratory (JLab), for which I am the Principal Investigator of several analyses. The most significant result I obtained is the first measurement of the reaction $\gamma p \rightarrow p\pi^0\eta$, one of the “golden channels” for the search for exotic mesons, i.e., states with quantum numbers J^{PC} incompatible with the constituent quark model: the pseudoscalar nature of the two mesons implies that any resonance in the $\pi^0\eta$ system measured with orbital angular momentum $L = 1$ must be exotic in nature. My analysis led to the first measurement of the differential cross section, from which I extracted the dominant contribution of the reaction channel $\gamma p \rightarrow a_2(1320)p$, a benchmark for any subsequent partial wave analysis of the reaction. The comparison of the cross section with a theoretical model developed in collaboration with the “JPAC” group at JLab confirmed the diffractive nature of the corresponding production mechanism. I published this work as first author in Phys. Rev. C, Rapid Communications section, in 2020. In the context of long-term developments in hadronic physics, I have been involved since 2020 in the preparation phase of the future Electron-Ion Collider (EIC) experiment, contributing to the identification and study of key reactions of interest for a hadronic spectroscopy program in the heavy quark sector.

Subsequently, since 2014 I have been working in the field of light dark matter (LDM) searches at accelerators. My most important scientific achievements in this context include the approval in 2018 of the “Beam Dump Experiment” (BDX) at JLab with the highest scientific rating and, above all, the awarding in 2020 of an ERC Starting Grant for the “POKER” experiment. The objective of POKER is to perform a first “missing energy” measurement with a 100 GeV positron beam impinging on a thick active target at the H4 beamline at CERN, exploiting for the first time the resonant electron-positron annihilation mechanism for LDM production. POKER will allow the exploration of a previously uncharted region in the LDM parameter space, with the potential to directly measure, in case of signal evidence, the mass of the new particles via the shape of the missing energy distribution.

In the various experimental contexts I have participated in, I have always carried out intensive R&D work on detectors, thanks in part to the comprehensive training I received while working on the development of the “Forward Tagger” detector for MesonEx and its integration into CLAS12. In this context, one of my most significant achievements was obtaining INFN-Gruppo5 funding in 2015 for young researchers for the “OptoTracker” project, aimed at verifying the feasibility of

a new approach to reconstructing the track of a charged particle propagating through a scintillating material, using the optical signal it emits. More recently, since 2018 I have focused on the development of new “triggerless” data acquisition systems. Starting from the specific case of the BDX experiment, I contributed to the construction of a prototype system and its experimental validation through beam tests. My appointment in 2020 as coordinator of the “Readout and DAQ” working group in the context of the preparation of the “EIC Yellow Report” programmatic document attests to the recognition of my role in this sector by the hadronic physics community.

Finally, I have solid experience as a coordinator of projects and research groups. I served as national INFN coordinator for the “OptoTracker” project (2015-2016, 141 k€), and I was co-coordinator of the INFN “PESCE” project (2019-2021, 80 k€). Lastly, I am the principal investigator of the ERC Starting Grant 2020 “POKER” project (December 2020 - November 2025, 1.484 M€) and of the ancillary MUR project “SOCIO” (December 2022 - November 2027, 298 k€).

6 Abilitazione scientifica nazionale

- Settore concorsuale 02/A1, prima fascia, maggio 2023
- Settore concorsuale 02/A1, seconda fascia, dicembre 2017

7 Scientific collaborations and responsibility roles

I am member of the following scientific collaborations: CLAS (2011-2024), HPS (2012-present), BDX (2014-present), EIC (2018-2023), NA64 (2020-present)

Responsibility roles:

- 2022-present: NA64 experiment “collaboration board” member and responsible of the NA64 experiment at INFN-Genova
- 2022-present: Principal investigator of the FARE-MUR project “SOCIO”.
- 2020-present: Principal investigator of the ERC Starting Grant 2020 “POKER”.
- 2018-2022: INFN local responsible of the EIC experiment.
- 2014-present: Spokeperson of the “Beam Dump eXperiment” (BDX) at Jefferson Laboratory.
- 2014-present: Member of the “Publications and Presentations Committee” of the HPS experiment.
 - 2018-present: Chair of the committee
- 2015-2016: PI of the “OptoTracker” experiment
 - 2014: Winner of INFN-Gruppo 5 call for new young scientists projects
- 2014-Present: Responsible of the LED monitoring system of the HPS - ECal detector.
- 2013-2024: Responsible of the DAQ system for the CLAS12 - Forward Tagger Calorimeter.

8 Research Funding as Principal Investigator

- 2022, FARE-MUR call, project “SOCIO”: 294 k€.
- 2020, ERC Starting Grant, project “POKER”: 1.484 M€.
- 2016, INFN call for newly hired researchers: 20 k€.
- 2014, INFN-Gruppo 5 call for young researchers: 176 k€.

Total funding obtained as Principal Investigator: 2.01 M€.

9 Scientific Metrics

Publications (source: INSPIRE, July 2025, peer-reviewed journal articles only):

- Number of publications: 155
- Total number of citations: 6898
- h-index: 43

10 Academic Experience

10.1 Official courses

- **AY 2024/2025, 2025/2026:** Lecturer for the course “Neutrons and nuclear reactors physics” (University of Genoa, Masters’s Degree in Physics)
- **AY 2018/2019, 2019/2020, 2020/2021, 2021/2022:** Lecturer for the course “General Physics - Module A” for Mechanical Engineering (University of Genoa, Bachelor’s Degree in Mechanical Engineering)
- **AY 2016/2017:** Lecturer for the course “General Physics - Module B” for Naval Engineering (University of Genoa, Bachelor’s Degree in Naval Engineering)

10.2 Teaching Support

- **AY 2015/2016, 2016/2017, 2017/2018:** Teaching assistant (exercise sessions) for the course “General Physics - Module B” for Biomedical Engineering (University of Genoa, Bachelor’s Degree in Biomedical Engineering)
- **AY 2012/2013:** Teaching assistant (exercise sessions) for the course “General Physics 1” for Electronic Engineering (University of Genoa, Bachelor’s Degree in Electronic Engineering)
- **AY 2011/2012:** Teaching assistant (exercise sessions) for the course “General Physics 1” for Electrical Engineering (University of Genoa, Bachelor’s Degree in Electrical Engineering)

10.3 Student Supervision

- Supervisor of four Master’s theses in Physics: L. Marsicano, S. Vallarino, P. Bisio, M. Spreafico (University of Genoa, Master’s Degree in Physics)
- Supervisor of one PhD thesis in Physics: P. Bisio (University of Genoa)

11 Conference Organization and Participation

11.1 Conference Organization

- **LDMA 2025**, Light Dark Matter @ Accelerators, Genova, April 2025. Coordinator of the local organizing committee.
- **LDMA 2019**, Light Dark Matter @ Accelerators, Venice, November 2019. Coordinator of the local organizing committee.
- **LDMA 2017**, Light Dark Matter @ Accelerators, La Biodola, May 24-28, 2017. Member of the local organizing committee.
- **LDMA 2015**, Light Dark Matter @ Accelerators, Camogli, June 24-26, 2015. Member of the local organizing committee.

11.2 Conference and Workshop Participation

11.2.1 Invited Talks

- **PAW 2024**, *Physics at AMBER international workshop*, CERN, 18-20 March 2024. Talk: “Dark Sector searches at NA64”.
- **WIFAI 2023**, Rome, November 8-10, 2023. Talk: “Dark Sector searches at NA64”.
- **Heraeus Seminar 2021 “Light Dark Matter Searches”**, online, June 8-11, 2021. Talk: “Light Dark Matter Search with the BDX experiment at Jefferson Laboratory”.

- **SIF 2019**, *CV National Congress of the Italian Physical Society*, GSSI (L'Aquila), September 23-27, 2019. Talk: "Dark Sector Searches at Jefferson Laboratory".
- **Next Frontiers in the Search for Dark Matter**, GGI (Florence), September 23-27, 2019. Talk: "An overview of experiments aiming to investigate the dark sector making use of electron beams".
- **INFN 2018**, *Fourth National Meeting on Nuclear Physics*, INFN-LNS (Catania), November 7-9, 2018. Talk: "First Results from Jefferson Lab with the Upgraded 12 GeV Electron Beam".
- **MC4BSM 2018**, Durham, April 18-21, 2018. Talk: "Monte Carlo Simulations for Dark Matter Searches in BDX".
- **Excited QCD 2017**, Sintra, May 7-13, 2017. Talk: "Photoproduction of exotic states".
- **US Cosmics Vision 2017**, *New Ideas in Dark Matter*, Washington DC, March 23-25, 2017. Talk: "The BDX experiment at Jefferson Laboratory".
- **BEACH 2016**, *XII International Conference on Hyperons, Charm and Beauty Hadrons*, GMU, VA, USA, June 12-18, 2016. Talk: "Dark sector searches at Jefferson Laboratory".
- **Dark Sectors 2016**, *Future Opportunities to Explore Light Dark Matter, Dark Photons and Other Hidden Sector Physics*, SLAC, April 28-30, 2016. Talk: "The BDX experiment at Jefferson Laboratory".
- **Spectroscopy of Resonances and QCD**, *ECT* Workshop*, Trento, February 8-12, 2016. Talk: "Spectroscopy Networking".
- **PWA8-ATHOS3**, *The International Workshop on Partial Wave Analysis for Hadron Spectroscopy*, Ashburn, April 13-17, 2015. Talk: "Application of the Veneziano model to light meson decays".
- **DHF 2014**, *International Conference on Dark Matter, Hadron Physics and Fusion Physics*, Messina, September 24-26, 2014. Talk: "The BDX experiment".
- **BEACH 2014**, *XI International Conference on Hyperons, Charm and Beauty Hadrons*, Birmingham, July 21-26, 2014. Talk: "The HPS experiment at Jefferson Laboratory".
- **MENU 2013**, *13th International Conference on Meson-Nucleon Physics and the Structure of the Nucleon*, Rome, September 30 - October 4, 2013. Talk: "The Forward Tagger Facility for low Q^2 experiments with CLAS12 at Jefferson Laboratory".
- **Excited QCD 2013**, Sarajevo, February 3-9, 2013. Talk: "Meson Spectroscopy at CLAS12".
- **International Seminar on Strong and Electromagnetic Interactions in High Energy Collisions**, Messina, October 12, 2012. Talk: "Meson Spectroscopy at JLab@12 GeV".

11.3 Other Contributions

- **ICHEP 2022**, Bologna, July 6-13, 2022. Talk: "The BDX experiment at Jefferson Laboratory".
- **SIF 2015**, *CI National Congress of the Italian Physical Society*, Rome, September 21-25, 2015. Talk: "The OptoTracker experiment".
- **What Next LNF**, *Perspectives of Fundamental Physics at the Frascati Laboratory*, Frascati, November 10-11, 2015. Talk: "BDX@LNF".
- **LTS1 2014**, *Workshop on the Long-Term Strategy of INFN-CSN1: The Next 10 Years of Accelerator-Based Experiments*, La Biodola, May 22-24, 2014. Talk: "Dark Matter Searches at Jefferson Laboratory".

- **SIF 2013**, *XCIX National Congress of the Italian Physical Society*, Trieste, September 23-27, 2013. Talk: “The HPS experiment at Jefferson Laboratory”.
- **SIF 2012**, *XCIIX National Congress of the Italian Physical Society*, Naples, September 23-27, 2012. Talk: “Neutron production from a thick beryllium target”.
- **Gordon Research Conference 2012**, *Photonuclear Reactions*, Holderness School, NH, USA, August 5-10, 2012. Poster: “The Forward Tagger detector for the MesonEx experiment at Jefferson Laboratory”.

12 Awards

- 2012: “Orso Maria Corbino” award for young researchers from the Italian Physical Society

Curriculum Vitae

Informazioni personali

Nome Stefania Farinon
indirizzo Via Dodecaneso 33 – 16146 ITALY
telefono +
e-mail
nazionalità italiana
Data di nascita

Formazione e occupazione

Dal 1/1/2021 ad oggi Dirigente Tecnologo presso l'INFN
Dal 2007 al 2020 Primo Tecnologo presso l'INFN
Dal 2001 to 2006 Tecnologo presso l'INFN
Dal 1996 to 2001 Posizione a tempo determinato nell'INFN per una collaborazione tecnica nell'ambito dell'esperimento CMS, con particolare riguardo allo studio dei disturbi e del comportamento meccanico della bobina superconduttrice.
dal 1994 al 1996 Borsa di Studio INFN per la progettazione magnetica meccanica e termica del solenoide superconduttore CMS
1994 Laurea in Fisica discutendo la tesi "Studio teorico e sperimentale della risposta spettrale di superconduttori esposti a campi magnetici variabili"

Progetti di ricerca e collaborazioni scientifiche

dal 2022 ad oggi Posizione: responsabile delle attività della Sezione di Genova dell'INFN dell'esperimento SIG (Superconducting Ion Gantry)
Progettazione meccanica e supervisione dell'assemblaggio di un dimostratore presso i laboratori LASA dell'INFN (Mi).
dal 2019 ad oggi Posizione: responsabile nazionale dell'esperimento INFN FalconD
Progettazione e supervisione della costruzione di un dimostratore di dipolo ad alto campo in Nb₃Sn
dal 2014 ad oggi Posizione: responsabile nazionale dell'esperimento INFN D2
Progettazione e supervisione della costruzione di un modello, di un prototipo e della serie di sei magneti del dipolo superconduttore D2 per l'upgrade ad alta luminosità del Large Hadron Collider al CERN
2015-2019 Posizione: responsabile delle attività INFN del WP5
Progettazione di un dipolo superconduttore da 16 T in Nb₃Sn per il Future Circular Collider al CERN nell'ambito dell'esperimento europeo EuroCircol.
2014-2016 Posizione: responsabile della progettazione
Progettazione e costruzione di un calorimetro per la misura ad altissima accuratezza del calore generato dalla sorgente di antineutrini 100kCi ¹⁴⁴Ce–¹⁴⁴Pr per l'esperimento INFN SOX
2014-2015 Posizione: progettista
Progettazione e costruzione del primo prototipo sui 27 moduli del solenoide di trasporto per l'esperimento Mu2e al Fermilab.
2013-2021 Posizione: collaborazione
Partecipazione agli studi sul rumore elettromagnetico e newtoniano per l'upgrade del rivelatore di onde gravitazionali Virgo

2013-2015	<u>Posizione:</u> progettista Progettazione di un magnete toroidale superconduttore per la schermatura di astroparticelle in missioni interplanetarie con equipaggio per l'esperimento europeo SR2S (Space Radiation Superconductive Shield).
2011-2013	<u>Posizione:</u> collaborazione alla progettazione e ai test Progettazione, costruzione e test di un modello di quadrupolo superconduttore per la regione di interazione della SuperB factory.
2005-2010	<u>Posizione:</u> responsabile della progettazione meccanica Progettazione e costruzione di un dipolo superconduttore a rampa veloce per il sincrotrone FAIR SIS300.
1995-2005	<u>Posizione:</u> progettista e responsabile della Qualità Progettazione e costruzione del solenoide superconduttore CMS al CERN LHC.
2005-2007	<u>Posizione:</u> responsabile delle attività della Sezione di Genova dell'INFN Sviluppo di un conduttore di Nb ₃ Sn ad alte prestazioni per il progetto europeo NED.
2003-2004	<u>Posizione:</u> responsabile delle attività della Sezione di Genova dell'INFN Progettazione del solenoide superconduttore per il ciclotrone SCENT (Superconducting Cyclotron for Exotic Nuclei and Therapy) presso il Laboratorio LNS dell'INFN.
2001-2003	<u>Posizione:</u> progettista Progettazione di un gantry a ioni pesanti per la radioterapia oncologica al centro CNAO.
1994-1996	<u>Posizione:</u> progettista Progettazione e costruzione del solenoide superconduttore BABAR per l'impianto SLAC di Stanford.
Incarichi editoriali	
dal 2005 ad oggi	<u>Editore</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti gli atti della Applied Superconductivity Conference e della Magnet Technology Conference.
dal 2019 ad oggi	<u>Editore</u> dei numeri regolari della rivista "IEEE Transaction on Applied Superconductivity"
Incarichi speciali:	
2005	<u>Chief Editor</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti i proceeding della 19 th Magnet Technology Conference.
2007	<u>Chief Editor</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti i proceeding della 20 th Magnet Technology Conference.
2009	<u>Lead Editor</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti i proceeding della 21 st Magnet Technology Conference
2010	<u>Chief Editor</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti i proceeding della 2010 Applied Superconductivity Conference.
2011	<u>Chief Editor</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti i proceeding della 22 nd Magnet Technology Conference.
2012	<u>Lead Editor</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti i proceeding della 2012 Applied Superconductivity Conference.
2013	<u>Chief Editor</u> della rivista "IEEE Transaction on Applied Superconductivity" per i numeri contenenti i proceeding della 23 rd Magnet Technology Conference.
2013	<u>Chief Editor</u> di "Journal of Physics: Conference Series" per la 2013 European Conference on Applied Superconductivity
Comitati scientifici	
2013	Membro del Comitato del Programma Scientifico della 23 rd Magnet Technology Conference.
2013	Membro del Comitato del Programma Scientifico della 2013 European Conference on Applied Superconductivity.
2014-2018	Membro eletto dell'Applied Superconductivity Conference Board Committee.

2014	Membro del Comitato del Programma Scientifico della 2014 Applied Superconductivity Conference
2016	Membro del Comitato del Programma Scientifico della 2016 Applied Superconductivity Conference
2018	Membro del Comitato del Programma Scientifico della 2018 Applied Superconductivity Conference
2019	Membro del Comitato del Programma Scientifico della 2019 European Conference on Applied Superconductivity.
2023	Membro del Comitato del Programma Scientifico della 2023 European Conference on Applied Superconductivity.

Attività e incarichi accademici

dall'A.A. 2021-2022 ad oggi

dall'A.A. 2018-2019 ad oggi

da Febbraio 2021 ad oggi

Docente per la Laurea Magistrale in Fisica: "Fisica e tecnologia dei magneti superconduttori" (24 ore)

Docente nel corso della Scuola di Dottorato in Fisica: "Progettazione di magneti superconduttori" (20 ore)

Membro del Collegio di Dottorato in Fisica

Relatrice delle seguenti tesi di laurea Magistrale:

A.A. 2000-2001 Luca Reina, Ingegneria meccanica

Tesi dal titolo: "Ottimizzazione dei parametri caratteristici di un magnete superconduttore tramite analisi FEM pilotate da algoritmi genetici"

A.A. 2001-2002 Thomas Coltella, Ingegneria meccanica

Tesi dal titolo: "Progetto meccanico delle strutture di contenimento di un magnete superconduttore per adroterapia oncologica"

A.A. 2018-2019 Filippo Levi, Fisica

Tesi dal titolo: "Studio degli effetti meccanici, magnetici e termici sulla qualità di campo di dipoli superconduttori per acceleratori adronici e del dipolo D2 per l'upgrade High-Luminosity di LHC"

A.A. 2019-2020 Ludovico Musenich, Ingegneria meccanica

Tesi dal titolo: "Modellazione FEM per la verifica strutturale del telaio portante del rivelatore di materia oscura DarkSide-20k"

A.A. 2020-2021 Gianluca Vernassa, Ingegneria meccanica

Tesi dal titolo: "Thermomechanical and electromagnetic analyses on a superconducting demonstrator magnet for Hadron Therapy"

A.A. 2020-2021 Francesco Lonardo, Ingegneria nucleare

Tesi dal titolo: "The D2 magnets for the LHC Luminosity upgrade: from prototype to series construction"

A.A. 2021-2022 Nicola Sala, Ingegneria meccanica

Tesi dal titolo: "Design and Optimization of the 2D cross-section for high field Nb3Sn magnets towards future accelerators"

A.A. 2022-2023 Emma Bianchi, Ingegneria meccanica

Tesi dal titolo: "Progettazione della struttura meccanica del dipolo superconduttore SIG per un gantry a ioni"

A.A. 2023-2024 Elena Cereghino

Tesi dal titolo: "Analisi sperimentale e numerica di tecnologie innovative di magneti superconduttori per le future applicazioni mediche e di fisica delle alte energie"

Supervisore delle seguenti tesi di Dottorato in Fisica:

XXXV Ciclo (2019) Filippo Levi

Tesi dal titolo: "Optimization and control of the field quality and the mechanical structure of superconducting dipoles for future accelerators"

**Capacità e competenze
personali**

Lingue
Capacità e competenze
tecniche

XXXVI Ciclo (2020) Sergio Burioli

Tesi dal titolo: "Mechanical effects on the performances of the superconducting cables and magnets for future accelerators"

XXXVIII Ciclo (2022) Daniel Novelli

Tesi dal titolo: "Development of superconducting magnets for the future FCC-hh and Muon Collider accelerators"

XXXIX Ciclo (2023) Alessio Dellacasagrande

Tesi dal titolo: "Conceptual electromagnetic design of the detector magnet for the ALICE 3 upgrade"

Buon inglese, parlato e scritto, conoscenza del francese

conoscenza approfondita della progettazione con strumenti ad elementi finiti

GENOVA, 20 maggio 2025

Stefania Farinon

2024

- 1. GWTC-2.1: Deep extended catalog of compact binary coalescences observed by LIGO and Virgo during the first half of the third observing run**
LIGO Sci Collaboration ; LIGO Sci Collaboration ; Virgo Collaboration
PHYSICAL REVIEW D Volume: 109 Issue: 2 Article Number: 022001 DOI: 10.1103/PhysRevD.109.022001 Published: JAN 2024.
- 2. Towards a muon collider**
Accettura, C; Adams, D; (...); Zurita, J
EUROPEAN PHYSICAL JOURNAL C Volume: 84 Issue 1 Article Number: 36 DOI: 10.1140/epjc/s10052-023-12257-5 Published: JAN 2024.
- 3. IRIS-A New Distributed Research Infrastructure on Applied Superconductivity**
Rossi, L; Arpaia, P; (...); Vannozzi, A
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 3 Article Number: 9500309 DOI: 10.1109/TASC.2023.3341984 Published: MAY 2024.
- 4. Status on the Development of the Nb₃Sn 12 T Falcon Dipole for the FCC-hh**
Valente, RU; Ballarino, A; (...); Vernassa, G
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 3 Article Number: 4900405 DOI: 10.1109/TASC.2023.3338166 Published: MAY 2024.
- 5. Magnets for a Muon Collider-Needs and Plans**
Bottura, L; Accettura, C; (...); Zlobin, A
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4005708 DOI: 10.1109/TASC.2024.3382069 Published: AUG 2024.
- 6. MBRD Prototype Cold Tests: Mechanical Stability and Performances**
Bersani, A; Bracco, M; (...); Willering, G
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4005005 DOI: 10.1109/TASC.2024.3371938 Published: AUG 2024.
- 7. Analytical Evaluation of Dipole Performance Limits for a Muon Collider**
Novelli, D; Bersani, A; (...); Valente, R
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4002405 DOI: 10.1109/TASC.2024.3352526 Published: AUG 2024.
- 8. Validation of the Protection Scheme for the HL-LHC MBRD Magnet by Simulations and Prototype Tests**
Caiffi, B; Bender, L; (...); Willering, G
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4001405 DOI: 10.1109/TASC.2023.3346363 Published: AUG 2024.
- 9. The Development of MBRD Magnets, the Separation/Recombination Dipoles for the LHC High Luminosity Upgrade**
Farinon, S; Angius, S; (...); Willering, G
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4003205 DOI: 10.1109/TASC.2024.3357469 Published: AUG 2024.
- 10. First Winding Trial for the Superconducting Ion Gantry (SIG) Dipole Demonstrator Magnet**
Prioli, M; Bianchi, E; (...); Karppinen, M
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4402605 DOI: 10.1109/TASC.2024.3361440 Published: AUG 2024.

11. Magnesium Diboride Magnets for Future Particle Detectors

Musenich, R; Bersani, A; (...); Farinon, S

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4500304 DOI: 10.1109/TASC.2023.3342760 Published: AUG 2024.

12. Field Quality Analysis of the Separation-Recombination Dipole MBRD for the High-Luminosity Upgrade of LHC

Pampaloni, A; Bersani, A; (...); Willering, G

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4000505 DOI: 10.1109/TASC.2023.3345826 Published: AUG 2024.

13. Mechanical Design of the 4 T Curved Demonstrator Dipole for the SIG Gantry

Levi, F; Bersani, A; (...); Valente, R

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4400505 DOI: 10.1109/TASC.2023.3333262 Published: AUG 2024.

14. 2D EM Design and Innovative Winding Technique for a 4 T High Curvature Superconducting Dipole in Block Coil Configuration for Next Generation Ion Gantries

Gagno, A; Farinon, S; (...); Valente, RU

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 34 Issue 5 Article Number: 4400305 DOI: 10.1109/TASC.2023.3335181 Published: AUG 2024.

2023

15. Mu2e Run I Sensitivity Projections for the Neutrinoless $\mu(-) \rightarrow e(-)$ Conversion Search in Aluminum

Mu2e Collaboration

UNIVERSE Volume: 9 Issue: 1 Article Number: 54 DOI: 10.3390/universe9010054 Published: JAN 2023.

16. Population of Merging Compact Binaries Inferred Using Gravitational Waves through GWTC-3

LIGO Sci Collaboration; Virgo Collaboration; Kagra Collaboration

PHYSICAL REVIEW X Volume: 13 Issue: 1 Article Number: 11048 DOI: 10.1103/PhysRevX.13.011048 Published: MAR 2023.

17. The superconducting space magnet of the ALADInO spectrometer

Musenich, R; Bersani, A; Bracco, M; Burioli, S; Caiffi, B; Farinon, S; Gagno, A; Levi, F; Pampaloni, A

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT Volume: 1051 Article Number: 168239 DOI: 10.1016/j.nima.2023.168239 Published: JUN 2023.

18. Constraints on the Cosmic Expansion History from GWTC-3

LIGO Sci Collaboration; LIGO Sci Collaboration; Virgo Collaboration; Virgo Collaboration; KAGRA Collaboration

ASTROPHYSICAL JOURNAL Volume: 949 Issue: 2 Article Number: 76 DOI: 10.3847/1538-4357/ac74bb Published: JUN 2023.

19. Status and Challenges of the Interaction Region Magnets for HL-LHC

Todesco, E; Bermudez, SI; (...); Cooley, L

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 33 Issue: 5 Article Number: 4001608 DOI: 10.1109/TASC.2023.3244143 Published: AUG 2023.

20. Design of a 4 T Curved Demonstrator Magnet for a Superconducting Ion Gantry

Prioli, M; De Matteis, E; (...); Valente, RU

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 33 Issue: 5 Article Number: 4400505 DOI: 10.1109/TASC.2023.3244523 Published: AUG 2023.

21. Protection Scheme Effectiveness Study for the High-Luminosity LHC MBRD Magnet

Caiffi, B; Bender, L; (...); Willering, G

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS

DETECTORS AND ASSOCIATED EQUIPMENT Volume: 33 Issue 5 Article Number: 4701304 DOI: 10.1109/TASC.2023.3247984 Published: AUG 2023.

22. Updates on the Mechanical Design of FalconD, a Nb₃Sn Cos theta Short Model Dipole for FCC-hh

Levi, F; Ballarino, A; (...); Wachal, P

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 33 Issue: 5 Article Number: 4000805 DOI: 10.1109/TASC.2023.3241832 Published: AUG 2023.

23. Optimization of Electromagnetic Design After Winding Tests for the Nb₃Sn Cos-Theta Dipole Model for FCC-hh

Valente, RU; Ballarino, A; (...); Vernassa, G

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY D Volume: 33 Issue: 5 Article Number: 4601107 DOI: 10.1109/TASC.2023.3246421 Published: AUG 2023.

24. The MBRD Dipoles for the Luminosity Upgrade at the LHC: From Prototype Tests to the Series Production

Farinon, S; Angius, S; (...); Willering, G

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY D Volume: 33 Issue: 5 Article Number: 4000306 DOI: 10.1109/TASC.2023.3238988 Published: AUG 2023.

25. Virgo detector characterization and data quality: results from the O3 run

Acernese, F; Agathos, M; (...); Zendri, JP

CLASSICAL AND QUANTUM GRAVITY Volume: 40 Issue 18 Article Number: 185006 DOI: 10.1088/1361-6382/acd92d Published: SEP 2023.

26. Virgo detector characterization and data quality: tools

Accettura, C; Adams, D; (...); Zurita, J

CLASSICAL AND QUANTUM GRAVITY Volume: 40 Issue 18 Article Number: 185005 DOI: 10.1088/1361-6382/acdf36 Published: SEP 2023.

27. Towards a muon collider

Acernese, F; Agathos, M; (...); Zendri, JP

EUROPEAN PHYSICAL JOURNAL C Volume: 83 Issue 9 Article Number: 864 DOI: 10.1140/epjc/s10052-023-11889-x Published: SEP 2023.

28. Search for Gravitational Waves Associated with Fast Radio Bursts Detected by CHIME/FRB during the LIGO-Virgo Observing Run O3a

LIGO Sci Collaboration; LIGO Sci Collaboration; Virgo Collaboration; Virgo Collaboration; KAGRA Collaboration; CHIME FRB Collaboration

ASTROPHYSICAL JOURNAL Volume: 955 Issue 2 Article Number: 155 DOI: 10.3847/1538-4357/acd770 Published: OCT 2023.

29. GWTC-3: Compact Binary Coalescences Observed by LIGO and Virgo during the Second Part of the Third Observing Run

LIGO Sci Collaboration; Virgo Collaboration; KAGRA Collaboration

PHYSICAL REVIEW X Volume: 13 Issue 4 Article Number: 41039 DOI: 10.1103/PhysRevX.13.041039 Published: DEC 2023.

2022

30. Search for continuous gravitational waves from 20 accreting millisecond x-ray pulsars in O3 LIGO data

Abbott, R; Abbott, TD; (...); Strohmayer, TE

PHYSICAL REVIEW D Volume: 105 Issue: 2 Article Number: 022002 DOI: 10.1103/PhysRevD.105.022002 Published: JAN 19 2022

31. Can electrons neutralize the electrostatic charge on test mass mirrors in gravitational wave detectors?

Spallino, L; Angelucci, M; (...); Cimino, R

PHYSICAL REVIEW D Volume: 105 Issue: 4 Article Number: 042003 DOI: 10.1103/PhysRevD.105.042003 Published: FEB 17 2022

- 32. Calibration of advanced Virgo and reconstruction of the detector strain $h(t)$ during the observing run O3**
Acernese, F; Agathos, M; (...); Zendri, JP
CLASSICAL AND QUANTUM GRAVITY Volume: 39 Issue: 4 Article Number: 045006 DOI: 10.1088/1361-6382/ac3c8e
Published: FEB 17 2022
- 33. Search for intermediate-mass black hole binaries in the third observing run of Advanced LIGO and Advanced Virgo**
Abbott, R; Abbott, TD; (...); Zweizig, J
ASTRONOMY & ASTROPHYSICS Volume: 659 Article Number: A84 DOI: 10.1051/0004-6361/202141452 Published:
MAR 16 2022
- 34. Constraints on dark photon dark matter using data from LIGO's and Virgo's third observing run**
Abbott, R; Abbott, TD; (...); Zweizig, J
PHYSICAL REVIEW D Volume: 105 Issue: 6 Article Number: 063030 DOI: 10.1103/PhysRevD.105.063030 Published:
MAR 31 2022
- 35. Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGO-Virgo Run O3b**
Abbott, R; Abbott, TD; (...); Zweizig, J
ASTROPHYSICAL JOURNAL Volume: 928 Issue: 2 Article Number: 186 DOI: 10.3847/1538-4357/ac532b Published:
APR 1 2022
- 36. Search of the early O3 LIGO data for continuous gravitational waves from the Cassiopeia A and Vela Jr. supernova remnants**
Abbott, R; Abbott, TD; (...); Zweizig, J
PHYSICAL REVIEW D Volume: 105 Issue: 8 Article Number: 082005 DOI: 10.1103/PhysRevD.105.082005 Published:
APR 28 2022
- 37. All-sky search for gravitational wave emission from scalar boson clouds around spinning black holes in LIGO O3 data**
Abbott, R; Abe, H; (...); Zweizig, J
PHYSICAL REVIEW D Volume: 105 Issue: 10 Article Number: 102001 DOI: 10.1103/PhysRevD.105.102001
Published: MAY 9 2022
- 38. Narrowband Searches for Continuous and Long-duration Transient Gravitational Waves from Known Pulsars in the LIGO-Virgo Third Observing Run**
Abbott, R; Abbott, TD; (...); Weltevrede, P
ASTROPHYSICAL JOURNAL Volume: 932 Issue: 2 Article Number: 133 DOI: 10.3847/1538-4357/ac6ad0 Published:
JUN 1 2022
- 39. A European Collaboration to Investigate Superconducting Magnets for Next Generation Heavy Ion Therapy**
Rossi, L; Ballarino, A; (...); Vieweg, M
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 32 Issue: 4 Article Number: 4400207 DOI:
10.1109/TASC.2022.3147433 Published: JUN 2022
- 40. Update on the Electromagnetic Design of the Nb3Sn Cos-Theta Dipole Model for FCC-hh**
Valente, RU; Burioli, S; (...); Tommasini, D
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 32 Issue: 4 Article Number: 4001005 DOI:
10.1109/TASC.2022.3152100 Published: JUN 2022
- 41. All-sky, all-frequency directional search for persistent gravitational waves from Advanced LIGO's and Advanced Virgo's first three observing runs**
Abbott, R; Abe, H; (...); Zweizig, J
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 105 Issue: 12 Article Number: 122001 DOI:
10.1103/PhysRevD.105.122001 Published: JUN 2022

- 42. First joint observation by the underground gravitational-wave detector KAGRA with GEO 600**
Abbott, R; Abe, H; (...); Zweizig, J
PROGRESS OF THEORETICAL AND EXPERIMENTAL PHYSICS Volume: 2022 Issue: 6 Article Number: 063F01 DOI: 10.1093/ptep/ptac073 Published: JUN 9 2022
- 43. Searches for Gravitational Waves from Known Pulsars at Two Harmonics in the Second and Third LIGO-Virgo Observing Runs**
Abbott, R; Abe, H; (...); Weltevrede, P
ASTROPHYSICAL JOURNAL Volume: 935 Issue: 1 Article Number: 1 DOI: 10.3847/1538-4357/ac6acf Published: AUG 1 2022
- 44. Search for Subsolar-Mass Binaries in the First Half of Advanced LIGO's and Advanced Virgo's Third Observing Run**
Abbott, R; Abe, H; (...); Weltevrede, P
PHYSICAL REVIEW LETTERS Volume: 129 Issue: 6 Article Number: 061104 DOI: 10.1103/PhysRevLett.129.061104 Published: AUG 5 2022
- 45. Search for continuous gravitational wave emission from the Milky Way center in O3 LIGO-Virgo data**
Abbott, R; Abe, H; (...); Zweizig, J
PHYSICAL REVIEW D Volume: 106 Issue: 4 Article Number: 042003 DOI: 10.1103/PhysRevD.106.042003 Published: AUG 9 2022
- 46. A Complete Magnetic Design and Improved Mechanical Project for the DUNE ND-GAr Solenoid Magnet**
Bersani, A; Bross, AD; (...); Pallavicini, M
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 32 Issue: 6 Article Number: 4500204 DOI: 10.1109/TASC.2022.3162168 Published: SEP 2022
- 47. The Separation-Recombination Dipole MBRD for the High-Luminosity LHC: From Prototype to Series**
Levi, F; Bersani, A; (...); Todesco, E
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 32 Issue: 6 DOI: 10.1109/TASC.2022.3160975 Published: SEP 2022
- 48. Preliminary Study of 4 T Superconducting Dipole for a Light Rotating Gantry for Ion-Therapy**
Rossi, L; Benedetto, E; (...); Valente, RU
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 32 Issue: 6 Article Number: 4400506 DOI: 10.1109/TASC.2022.3157663 Published: SEP 2022
- 49. Numerical Model, Parametric Analysis, and Optimization of FCC's 16 T Main Dipole Baseline Design**
Kokkinos, C; Farinon, S; (...); Rodopoulos, D
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 32 Issue: 6 Article Number: 4001306 DOI: 10.1109/TASC.2022.3152710 Published: SEP 2022
- 50. Mechanical Design of FalconD, a Nb3Sn Cos theta Short Model Dipole for the FCC**
Pampaloni, A; Bellomo, G; (...); Valente, RU
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume: 32 Issue: 6 Article Number: 4000605 DOI: 10.1109/TASC.2022.3149679 Published: SEP 2022
- 51. Search for gravitational waves from Scorpius X-1 with a hidden Markov model in O3 LIGO data**
Abbott, R; Abe, H; (...); Zweizig, J
PHYSICAL REVIEW D Volume: 106 Issue: 106 Article Number: 062002 DOI: 10.1103/PhysRevD.106.062002 Published: SEP 21 2022
- 52. All-sky search for continuous gravitational waves from isolated neutron stars using Advanced LIGO and Advanced Virgo O3 data**
Abbott, R; Abe, H; (...); Zweizig, J
PHYSICAL REVIEW D Volume: 106 Issue: 10 Article Number: 102008 DOI: 10.1103/PhysRevD.106.102008 Published: NOV 28 2022

53. The Virgo O3 run and the impact of the environment

Abbott, R; Abe, H; (...); Zweizig, J

CLASSICAL AND QUANTUM GRAVITY Volume: 39 Issue: 23 Article Number: 063F01 DOI: 10.1088/1361-6382/ac776a Published: DEC 1 2022

2021

54. A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo (vol 908, 218, 2021)

Abbott, R; Abbott, TD; (...); Zweizig, J

PHYSICAL REVIEW D Volume 104 Issue 12 Article Number 122004 DOI 10.1103/PhysRevD.104.122004 Published DEC 2021

55. A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo (vol 908, 218, 2021)

Abbott, R; Abbott, TD; (...); Zweizig, J

ASTROPHYSICAL JOURNAL Volume 923 Issue 2 Article Number 279 DOI 10.3847/1538-4357/ac4267 Published DEC 2021

56. Search for Lensing Signatures in the Gravitational-Wave Observations from the First Half of LIGO-Virgo's Third Observing Run

Abbott, R; Abbott, TD; (...); Zweizig, J

ASTROPHYSICAL JOURNAL Volume 923 Issue 1 Article Number 14 DOI 10.3847/1538-4357/ac23db Published DEC 2021

57. All-sky search for long-duration gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run

Abbott, R; Abbott, TD; (...); Zweizig, J

PHYSICAL REVIEW D Volume 104 Issue 10 Article Number 102001 DOI 10.1103/PhysRevD.104.102001 Published NOV 2021

58. Constraints from LIGO O3 Data on Gravitational-wave Emission Due to R-modes in the Glitching Pulsar PSR J0537-6910

Abbott, R; Abbott, TD; (...); Guillot, S

ASTROPHYSICAL JOURNAL Volume 922 Issue 1 Article Number 71 DOI 10.3847/1538-4357/ac0d52 Published NOV 2021

59. Searches for Continuous Gravitational Waves from Young Supernova Remnants in the Early Third Observing Run of Advanced LIGO and Virgo

Abbott, R; Abbott, TD; (...); Zweizig, J

ASTROPHYSICAL JOURNAL Volume 921 Issue 1 Article Number 80 DOI 10.3847/1538-4357/ac17ea Published NOV 2021

60. All-sky search for continuous gravitational waves from isolated neutron stars in the early O3 LIGO data

By LIGO Sci Collaboration; Virgo Collaboration, KAGRA Collaboration

PHYSICAL REVIEW D Volume 104 Issue 8 Article Number 082004 DOI 10.1103/PhysRevD.104.082004 Published OCT 8 2021

61. Searches for Continuous Gravitational Waves from Nine Young Supernova Remnants (vol 813, 39, 2015)

By LIGO Sci Collaboration; Virgo Collaboration, KAGRA Collaboration

ASTROPHYSICAL JOURNAL Volume 918 Issue 2 Article Number 90 DOI 10.3847/1538-4357/ac1f2d Published SEP 2021

62. Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO (vol 875, 122, 2019)

By LIGO Sci Collaboration; Virgo Collaboration, KAGRA Collaboration

63. A Solenoid With Partial Yoke for the DUNE Near Detector

By Bersani, Andrea, Bross, Alan, Caiffi, Barbara, et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 31 Issue 5 Article Number 4500404 DOI 10.1109/TASC.2021.3063068 Published AUG 2021

64. The Development of the Superconducting Dipoles D2 for the High Luminosity Upgrade of LHC

By Caiffi, Barbara, Bersani, Andrea, Cereseto, Roberto, et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 31 Issue 5 Article Number 4000405 DOI 10.1109/TASC.2021.3057561 Published AUG 2021

65. Preliminary Design of the Nb₃Sn cos theta Short Model for the FCC

By Pampaloni, Alessandra, Bellomo, Giovanni, Burioli, Sergio, et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 31 Issue 5 Article Number 4900905 DOI 10.1109/TASC.2021.3061334 Published AUG 2021

66. Search for anisotropic gravitational-wave backgrounds using data from Advanced LIGO and Advanced Virgo's first three observing runs

By LIGO Sci Collaboration; Virgo Collaboration, KAGRA Collaboration

PHYSICAL REVIEW D Volume 104 Issue 2 Article Number 022005 DOI 10.1103/PhysRevD.104.022005 Published JUL 27 2021

67. Upper limits on the isotropic gravitational-wave background from Advanced LIGO and Advanced Virgo's third observing run

By LIGO Sci Collaboration; Virgo Collaboration, KAGRA Collaboration

PHYSICAL REVIEW D Volume 104 Issue 2 Article Number 022004 DOI 10.1103/PhysRevD.104.022004 Published JUL 23 2021

68. Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGO-Virgo Run O3a

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL Volume 915 Issue 2 Article Number 86 DOI 10.3847/1538-4357/abee15 Published JUL 2021

69. Observation of Gravitational Waves from Two Neutron Star-Black Hole Coalescences

By LIGO Sci Collaboration; Virgo Collaboration, KAGRA Collaboration

ASTROPHYSICAL JOURNAL LETTERS Volume 915 Issue 1 Article Number L5 DOI 10.3847/2041-8213/ac082e Published JUL 2021

70. Constraints on Cosmic Strings Using Data from the Third Advanced LIGO-Virgo Observing Run

By LIGO Sci Collaboration; Virgo Collaboration, KAGRA Collaboration

PHYSICAL REVIEW LETTERS Volume 126 Issue 24 Article Number 241102 DOI 10.1103/PhysRevLett.126.241102 Published JUN 16 2021

71. Tests of general relativity with binary black holes from the second LIGO-Virgo gravitational-wave transient catalog

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW D Volume 103 Issue 12 Article Number 122002 DOI 10.1103/PhysRevD.103.122002 Published JUN 15 2021

72. GWTC-2: Compact Binary Coalescences Observed by LIGO and Virgo during the First Half of the Third Observing Run

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW X Volume 11 Issue 2 Article Number 021053 DOI 10.1103/PhysRevX.11.021053 Published JUN 9 2021

- 73. Diving below the Spin-down Limit: Constraints on Gravitational Waves from the Energetic Young Pulsar PSR J0537-6910**
By LIGO Sci Collaboration; Virgo Collaboration, KAGRA Collaboration
ASTROPHYSICAL JOURNAL LETTERS Volume 913 Issue 2 Article Number L27 DOI 10.3847/2041-8213/abffcd
Published JUN 2021
 - 74. Population Properties of Compact Objects from the Second LIGO-Virgo Gravitational-Wave Transient Catalog**
By LIGO Sci Collaboration; Virgo Collaboration
ASTROPHYSICAL JOURNAL LETTERS Volume 913 Issue 1 Article Number L7 DOI 10.3847/2041-8213/abe949
Published MAY 2021
 - 75. The High Luminosity LHC interaction region magnets towards series production**
By Todesco, E, Bajas, H, Bajko, M, et al.
SUPERCONDUCTOR SCIENCE & TECHNOLOGY Volume 34 Issue 5 Article Number 053001 DOI 10.1088/1361-6668/abdba4 Published MAY 2021
 - 76. Biot-Savart Approach to Analytical Computation of Magnetic Fields and Forces of CCT Magnets**
By Farinon, Stefania, Musenich, Riccardo
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 31 Issue 3 Article Number 4900308 DOI 10.1109/TASC.2021.3053346 Published APR 2021
 - 77. All-sky search in early O3 LIGO data for continuous gravitational-wave signals from unknown neutron stars in binary systems**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 103 Issue 6 Article Number 064017 DOI 10.1103/PhysRevD.103.064017 Published MAR 12 2021
 - 78. A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo**
By LIGO Sci Collaboration; Virgo Collaboration
ASTROPHYSICAL JOURNAL Volume 909 Issue 2 Article Number 218 DOI 10.3847/1538-4357/abdcbb7 Published MAR 2021
 - 79. Open data from the first and second observing runs of Advanced LIGO and Advanced Virgo**
By LIGO Sci Collaboration; Virgo Collaboration
SOFTWAREX Volume 13 Article Number 100658 DOI 10.1016/j.softx.2021.100658 Published JAN 2021
- 2020**
- 80. Gravitational-wave Constraints on the Equatorial Ellipticity of Millisecond Pulsars**
By LIGO Sci Collaboration; Virgo Collaboration
ASTROPHYSICAL JOURNAL LETTERS Volume 902 Issue 1 Article Number L21 DOI 10.3847/2041-8213/abb655
Published OCT 2020
 - 81. Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA**
By LIGO Sci Collaboration; Virgo Collaboration
LIVING REVIEWS IN RELATIVITY Volume 23 Issue 1 Article Number 3 DOI 10.1007/s41114-020-00026-9 Published SEP 28 2020
 - 82. Quantum Backaction on Kg-Scale Mirrors Observation of Radiation Pressure Noise in the Advanced Virgo Detector**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW LETTERS Volume 125 Issue 13 Article Number 131101 DOI 10.1103/PhysRevLett.125.131101
Published SEP 22 2020
 - 83. GW190521 A Binary Black Hole Merger with a Total Mass of 150 $M_{\odot}$**
By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW LETTERS Volume 125 Issue 10 Article Number 101102 DOI 10.1103/PhysRevLett.125.101102
Published SEP 2 2020

84. [Properties and Astrophysical Implications of the 150 M Binary Black Hole Merger GW190521](#)

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL LETTERS Volume 900 Issue 1 Article Number L13 DOI 10.3847/2041-8213/aba493
Published SEP 2020

85. [GW190412: Observation of a binary-black-hole coalescence with asymmetric masses](#)

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW D Volume 102 Issue 4 Article Number 043015 DOI 10.1103/PhysRevD.102.043015 Published AUG 24 2020

86. [Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015-2017 LIGO Data \(vol 879, 10, 2019\)](#)

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL Volume 899 Issue 2 Article Number 170 DOI 10.3847/1538-4357/abaabb Published AUG 2020

87. [GW190814: Gravitational Waves from the Coalescence of a 23 Solar Mass Black Hole with a 2.6 Solar Mass Compact Object](#)

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL LETTERS Volume 896 Issue 2 Article Number L44 DOI 10.3847/2041-8213/ab960f
Published JUN 2020

88. [The HL-LHC Short Model Recombination D2 Dipole: Cold Test Results and Analysis](#)

By Foussat, Arnaud, Fabbriatore, Pasquale, Mangiarotti, Franco, et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 30 Issue 4 DOI 10.1109/TASC.2020.2976963
Published JUN 2020

89. [A Proposal for a Superconducting Space Magnet for an Antimatter Spectrometer](#)

By Musenich, Riccardo, Adriani, Oscar, Boudouy, Bertrand, et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 30 Issue 4 Article Number 4500305 DOI 10.1109/TASC.2020.2976970 Published JUN 2020

90. [Electromagnetic and Mechanical Study for the Nb3Sn Cos-Theta Dipole Model for the FCC](#)

By Valente, Riccardo, Bellomo, Giovanni, Fabbriatore, Pasquale, Farinon, Stefania, et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 30 Issue 4 DOI 10.1109/TASC.2020.2972219
Published JUN 2020

91. [Optically targeted search for gravitational waves emitted by core-collapse supernovae during the first and second observing runs of advanced LIGO and advanced Virgo](#)

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW D Volume 101 Issue 8 Article Number 084002 DOI 10.1103/PhysRevD.101.084002 Published APR 2 2020

92. [A Joint Fermi-GBM and LIGO/Virgo Analysis of Compact Binary Mergers from the First and Second Gravitational-wave Observing Runs](#)

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL Volume 893 Issue 2 Article Number 100 DOI 10.3847/1538-4357/ab7d3e Published APR 2020

93. [GW190425: Observation of a Compact Binary Coalescence with Total Mass similar to 3.4 M-circle dot](#)

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL LETTERS Volume 892 Issue 1 Article Number L3 DOI 10.3847/2041-8213/ab75f5 Published MAR 20 2020

94. A guide to LIGO-Virgo detector noise and extraction of transient gravitational-wave signals

By LIGO Sci Collaboration; Virgo Collaboration

CLASSICAL AND QUANTUM GRAVITY Volume 37 Issue 5 Article Number 055002 DOI 10.1088/1361-6382/ab685e

Published MAR 5 2020

95. The advanced Virgo longitudinal control system for the O2 observing run

By Virgo Collaboration

ASTROPARTICLE PHYSICS Volume 116 Article Number UNSP 102386 Published MAR 2020 DOI

10.1016/j.astropartphys.2019.07.005

96. Design of the 16 T bending dipole for the Future Circular Collider

By Bellomo, Giovanni, Caiffi, Barbara, Fabbicatore, Pasquale, Farinon, Stefania, et al.

NUOVO CIMENTO C-COLLOQUIA AND COMMUNICATIONS IN PHYSICS Volume 43 Issue 2-3 Article Number 94 DOI

10.1393/ncc/i2020-20094-3 Published MAR-JUN 2020

97. Model comparison from LIGO-Virgo data on GW170817's binary components and consequences for the merger remnant

By LIGO Sci Collaboration; Virgo Collaboration

CLASSICAL AND QUANTUM GRAVITY Volume 37 Issue 4 Article Number 045006 DOI 10.1088/1361-6382/ab5f7c

Published FEB 2020

2019

98. Increasing the Astrophysical Reach of the Advanced Virgo Detector via the Application of Squeezed Vacuum States of Light

By Virgo Collaboration

PHYSICAL REVIEW LETTERS Volume 123 Issue 23 Article Number 231108 Published DEC 5 2019 DOI

10.1103/PhysRevLett.123.231108

99. Search for gravitational waves from Scorpius X-1 in the second Advanced LIGO observing run with an improved hidden Markov model

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW D Volume 100 Issue 12 Article Number 122002 Published DEC 4 2019 DOI

10.1103/PhysRevD.100.122002d

100. The CLIQ Quench Protection System Applied to the 16 T FCC-hh Dipole Magnets

By Prioli, Marco; Salmi, Tiina; Auchmann, Bernhard; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 29 Issue 8 Article Number 4703209 Published DEC

2019 DOI 10.1109/TASC.2019.2930705

101. Search for Gravitational-wave Signals Associated with Gamma-Ray Bursts during the Second Observing Run of Advanced LIGO and Advanced Virgo

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL Volume 886 Issue 1 Article Number 75 Published NOV 20 2019 DOI 10.3847/1538-

4357/ab4b48

102. Tests of general relativity with the binary black hole signals from the LIGO-Virgo catalog GWTC-1

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW D Volume 100 Issue 10 Article Number 104036 Published NOV 20 2019 DOI

10.1103/PhysRevD.100.104036

103. Search for Substellar Mass Ultracompact Binaries in Advanced LIGO's Second Observing Run

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW LETTERS Volume 123 Issue 16 Article Number 161102 Published OCT 18 2019 DOI

10.1103/PhysRevLett.123.161102

- 104. Search for Eccentric Binary Black Hole Mergers with Advanced LIGO and Advanced Virgo during Their First and Second Observing Runs**
By LIGO Sci Collaboration; Virgo Collaboration
ASTROPHYSICAL JOURNAL Volume 883 Issue 2 Article Number 149 Published OCT 1 2019 DOI 10.3847/1538-4357/ab3c2d
- 105. Search for intermediate mass black hole binaries in the first and second observing runs of the Advanced LIGO and Virgo network**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 100 Issue 6 Article Number 064064 Published SEP 30 2019 DOI 10.1103/PhysRevD.100.064064
- 106. Binary Black Hole Population Properties Inferred from the First and Second Observing Runs of Advanced LIGO and Advanced Virgo**
By LIGO Sci Collaboration; Virgo Collaboration
ASTROPHYSICAL JOURNAL LETTERS Volume 882 Issue 2 Article Number L24 Published SEP 10 2019 DOI 10.3847/2041-8213/ab3800
- 107. Search for the isotropic stochastic background using data from Advanced LIGO's second observing run**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 100 Issue 6 Article Number 061101 Published SEP 4 2019 DOI 10.1103/PhysRevD.100.061101
- 108. Directional limits on persistent gravitational waves using data from Advanced LIGO's first two observing runs**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 100 Issue 6 Article Number 062001 Published SEP 4 2019 DOI 10.1103/PhysRevD.100.062001
- 109. GWTC-1 A Gravitational-Wave Transient Catalog of Compact Binary Mergers Observed by LIGO and Virgo during the First and Second Observing Runs**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW X Volume 9 Issue 3 Article Number 031040 Published SEP 4 2019 DOI 10.1103/PhysRevX.9.031040
- 110. Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015-2017 LIGO Data (vol 879, 10, 2019)**
By LIGO Sci Collaboration; Virgo Collaboration
ASTROPHYSICAL JOURNAL Volume 882 Issue 1 Article Number 73 Published SEP 1 2019 DOI 10.3847/1538-4357/ab3231
- 111. The Superconducting Separation Dipoles MBRD for the High Luminosity Upgrade of LHC From Short Model to Prototype**
By Bersani, Andrea; Caiffi, Barbara; Cereseto, Roberto; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 29 Issue 5 Article Number 4003305 Published AUG 2019 DOI 10.1109/TASC.2019.2900598
- 112. The 16 T Dipole Development Program for FCC and HE-LHC**
By Schoerling, Daniel; Arbelaez, Diego; Auchmann, Bernhard; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 29 Issue 5 Article Number 4003109 Published AUG 2019 DOI 10.1109/TASC.2019.2900556
- 113. Baseline Design of a 16 T cos theta Bending Dipole for the Future Circular Collider**
By Valente, Riccardo; Bellomo, Giovanni; Caiffi, Barbara; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 29 Issue 5 Article Number 4003005 Published AUG 2019 DOI 10.1109/TASC.2019.2901604

- 114. Preliminary Design of the Recombination Dipole for Future Circular Collider**
By Pampaloni, Alessandra; Bersani, Andrea; Caiffi, Barbara; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 29 Issue 5 Article Number 4000504 Published AUG 2019 DOI 10.1109/TASC.2019.2892725
- 115. All-sky search for short gravitational-wave bursts in the second Advanced LIGO and Advanced Virgo run**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 100 Issue 2 Article Number 024017 Published JUL 11 2019 DOI 10.1103/PhysRevD.100.024017
- 116. All-sky search for continuous gravitational waves from isolated neutron stars using Advanced LIGO O2 data**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 100 Issue 2 Article Number 024004 Published JUL 8 2019 DOI 10.1103/PhysRevD.100.024004
- 117. FCC-hh The Hadron Collider Future Circular Collider Conceptual Design Report Volume 3**
By FCC Collaboration
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS Volume 228 Issue 4 Pages 755-1107 Published JUL 2019 DOI 10.1140/epjst/e2019-900087-0
- 118. HE-LHC The High-Energy Large Hadron Collider Future Circular Collider Conceptual Design Report Volume 4**
By FCC Collaboration
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS Volume 228 Issue 5 Pages 1109-1382 Published JUL 2019 DOI 10.1140/epjst/e2019-900088-6
- 119. Tests of General Relativity with GW170817**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW LETTERS Volume 123 Issue 1 Article Number 011102 Published JUL 1 2019 DOI 10.1103/PhysRevLett.123.011102
- 120. Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015-2017 LIGO Data**
By LIGO Sci Collaboration; Virgo Collaboration
ASTROPHYSICAL JOURNAL Volume 879 Issue 1 Article Number 10 Published JUL 1 2019 DOI 10.3847/1538-4357/ab20cb
- 121. Narrow-band search for gravitational waves from known pulsars using the second LIGO observing run**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 99 Issue 12 Article Number 122002 Published JUN 27 2019 DOI 10.1103/PhysRevD.99.122002
- 122. FCC Physics Opportunities Future Circular Collider Conceptual Design Report Volume 1**
By FCC Collaboration
EUROPEAN PHYSICAL JOURNAL C Volume 79 Issue 6 Article Number 474 Published JUN 5 2019 DOI 10.1140/epjc/s10052-019-6904-3
- 123. FCC-ee The Lepton Collider Future Circular Collider Conceptual Design Report Volume 2**
By FCC Collaboration
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS Volume 228 Issue 2 Pages 261-623 Published JUN 2019 DOI 10.1140/epjst/e2019-900045-4
- 124. All-sky search for long-duration gravitational-wave transients in the second Advanced LIGO observing run**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 99 Issue 10 Article Number 104033 Published MAY 14 2019 DOI 10.1103/PhysRevD.99.104033
- 125. First Measurement of the Hubble Constant from a Dark Standard Siren using the Dark Energy Survey Galaxies and the LIGO/Virgo Binary-Black-hole Merger GW170814**

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL LETTERS Volume 876 Issue 1 Article Number L7 Published MAY 1 2019 DOI 10.3847/2041-8213/ab14f1

126. Low-latency Gravitational-wave Alerts for Multimessenger Astronomy during the Second Advanced LIGO and Virgo Observing Run

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL Volume 875 Issue 2 Article Number 161 Published APR 20 2019 DOI 10.3847/1538-4357/ab0e8f

127. Search for Gravitational Waves from a Long-lived Remnant of the Binary Neutron Star Merger GW170817

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL Volume 875 Issue 2 Article Number 160 Published APR 20 2019 DOI 10.3847/1538-4357/ab0f3d

128. Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL Volume 875 Issue 2 Article Number 122 Published APR 20 2019 DOI 10.3847/1538-4357/ab113b

129. Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGO's Second Observing Run

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL Volume 874 Issue 2 Article Number 163 Published APR 1 2019 DOI 10.3847/1538-4357/ab0e15

130. Constraining the p-Mode-g-Mode Tidal Instability with GW170817

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW LETTERS Volume 122 Issue 6 Article Number 061104 Published FEB 13 2019 DOI 10.1103/PhysRevLett.122.061104

131. A Fermi Gamma-Ray Burst Monitor Search for Electromagnetic Signals Coincident with Gravitational-wave Candidates in Advanced LIGO's First Observing Run

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL Volume 871 Issue 1 Article Number UNSP 90 Published JAN 20 2019 DOI 10.3847/1538-4357/aaf726

132. A Standard Siren Measurement of the Hubble Constant from GW170817 without the Electromagnetic Counterpart

By Fishbach, M.; Gray, R.; Hernandez, I. Magana; et al.

ASTROPHYSICAL JOURNAL LETTERS Volume 871 Issue 1 Article Number L13 Published JAN 20 2019 DOI 10.3847/2041-8213/aaf96e

133. Search for Multimessenger Sources of Gravitational Waves and High-energy Neutrinos with Advanced LIGO during Its First Observing Run, ANTARES, and IceCube

By ANTARES Collaboration; IceCube Collaboration; et al.

ASTROPHYSICAL JOURNAL Volume 870 Issue 2 Article Number 134 Published JAN 10 2019 DOI 10.3847/1538-4357/aaf21d

134. Properties of the Binary Neutron Star Merger GW170817

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW X Volume 9 Issue 1 Article Number 011001 Published JAN 2 2019 DOI 10.1103/PhysRevX.9.011001

- 135. Search for Substellar-Mass Ultracompact Binaries in Advanced LIGO's First Observing Run**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW LETTERS Volume 121 Issue 23 Article Number 231103 Published DEC 7 2018 DOI 10.1103/PhysRevLett.121.231103
- 136. Magnetic coupling to the advanced Virgo payloads and its impact on the low frequency sensitivity**
By Cirone, A.; Chincarini, A.; Neri, M.; et al.
REVIEW OF SCIENTIFIC INSTRUMENTS Volume 89 Issue 11 Article Number 114501 Published NOV 2018
- 137. Calibration of advanced Virgo and reconstruction of the gravitational wave signal $h(t)$ during the observing run O2**
By Virgo Collaboration
CLASSICAL AND QUANTUM GRAVITY Volume 35 Issue 20 Article Number 205004 Published OCT 25 2018 DOI 10.1088/1361-6382/aadf1a
- 138. GW170817 Measurements of Neutron Star Radii and Equation of State**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW LETTERS Volume 121 Issue 16 Article Number 161101 Published OCT 15 2018 DOI 10.1103/PhysRevLett.121.161101
- 139. Mechanical stress analysis during a quench in CLIQ protected 16 T dipole magnets designed for the future circular collider**
By Zhao, Junjie; Prioli, Marco; Stenvall, Antti; et al.
PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS Volume 550 Pages 27-34 Published JUL 15 2018 DOI 10.1016/j.physc.2018.04.003
- 140. Study of a Superconducting Magnetic Diverter for the ATHENA X-Ray Space Telescope**
By Riva, Nicolo; Calvelli, Valerio; Musenich, Riccardo; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 28 Issue 4 Article Number 4603804 Published JUN 2018 DOI 10.1109/TASC.2018.2811862
- 141. Update on Mechanical Design of a Cos theta 16-T Bending Dipole for the Future Circular Collider**
By Caiffi, Barbara; Bellomo, Giovanni; Fabbriatore, Pasquale; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 28 Issue 4 Article Number 4006704 Published JUN 2018 DOI 10.1109/TASC.2018.2805918
- 142. Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW LETTERS Volume 120 Issue 20 Article Number 201102 Published MAY 16 2018 DOI 10.1103/PhysRevLett.120.201102
- 143. Full band all-sky search for periodic gravitational waves in the O1 LIGO data**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 97 Issue 10 Article Number 102003 Published MAY 11 2018 DOI 10.1103/PhysRevD.97.102003
- 144. Constraints on cosmic strings using data from the first Advanced LIGO observing run**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 97 Issue 10 Article Number 102002 Published MAY 8 2018 DOI 10.1103/PhysRevD.97.102002
- 145. Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA**
By KAGRA Collaboration; LIGO Sci Collaboration; LIGO Sci Collaboration; et al.
LIVING REVIEWS IN RELATIVITY Volume 21 Article Number 3 Published APR 26 2018 DOI 10.1007/s41114-018-0012-9

- 146. Conceptual Design of a 16 T cos theta Bending Dipole for the Future Circular Collider**
By Marinozzi, Vittorio; Bellomo, Giovanni; Caiffi, Barbara; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 28 Issue 3 Article Number 4004205 Published APR 2018 DOI 10.1109/TASC.2018.2795533
- 147. Influence of 3-D Effects on Field Quality in the Straight Part of Accelerator Magnets for the High-Luminosity Large Hadron Collider**
By Nilsson, Emelie; Bermudez, Susana Izquierdo; Todesco, Ezio; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 28 Issue 3 Article Number 4003005 Published APR 2018 DOI 10.1109/TASC.2017.2785273
- 148. Status of the 16 T Dipole Development Program for a Future Hadron Collider**
By Tommasini, Davide; Arbelaez, Diego; Auchmann, Bernhard; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 28 Issue 3 Article Number 4001305 Published APR 2018 DOI 10.1109/TASC.2017.2780045
- 149. Development of a Short Model of the Superconducting Separation Dipoles D2 for the High Luminosity Upgrade of LHC**
By Fabbriatore, Pasquale; Bersani, Andrea; Caiffi, Barbara; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 28 Issue 3 Article Number 4000105 Published APR 2018 DOI 10.1109/TASC.2017.2772779
- 150. Effects of data quality vetoes on a search for compact binary coalescences in Advanced LIGO's first observing run**
By LIGO Sci Collaboration; LIGO Sci Collaboration; Virgo Collaboration
CLASSICAL AND QUANTUM GRAVITY Volume 35 Issue 6 Article Number 065010 Published MAR 22 2018 DOI 10.1088/1361-6382/aaaafa
- 151. All-sky search for long-duration gravitational wave transients in the first Advanced LIGO observing run**
By LIGO Sci Collaboration; LIGO Sci Collaboration; Virgo Collaboration
CLASSICAL AND QUANTUM GRAVITY Volume 35 Issue 6 Article Number 065009 Published MAR 22 2018 DOI 10.1088/1361-6382/aaab76
- 152. GW170817 Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences**
By Abbott, B. P.; Abbott, R.; Abbott, T. D.; et al.
PHYSICAL REVIEW LETTERS Volume 120 Issue 9 Article Number 091101 Published FEB 28 2018 DOI 10.1103/PhysRevLett.120.091101
- 153. First Search for Nontensorial Gravitational Waves from Known Pulsars**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW LETTERS Volume 120 Issue 3 Article Number 031104 Published JAN 19 2018 DOI 10.1103/PhysRevLett.120.031104

2017

- 154. First narrow-band search for continuous gravitational waves from known pulsars in advanced detector data**
By LIGO Scientific Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 96 Issue 12 Article Number 122006 Published DEC 28 2017 DOI 10.1103/PhysRevD.96.122006
- 155. GW170608 Observation of a 19 Solar-mass Binary Black Hole Coalescence**
By LIGO Sci Collaboration; Virgo Collaboration
ASTROPHYSICAL JOURNAL LETTERS Volume 851 Issue 2 Article Number L35 Published DEC 20 2017 DOI 10.3847/2041-8213/aa9f0c
- 156. First Search for Gravitational Waves from Known Pulsars with Advanced LIGO (vol 839, 12, 2017)**
By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL Volume 851 Issue 1 Article Number 71 Published DEC 10 2017 DOI 10.3847/1538-4357/aa9aee

157. [Search for Post-merger Gravitational Waves from the Remnant of the Binary Neutron Star Merger GW170817](#)

By Abbott, B. P.; Abbott, R.; Abbott, T. D.; et al.

ASTROPHYSICAL JOURNAL LETTERS Volume 851 Issue 1 Article Number L16 Published DEC 10 2017 DOI 10.3847/2041-8213/aa9a35

158. [First low-frequency Einstein@Home all-sky search for continuous gravitational waves in Advanced LIGO data](#)

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW D Volume 96 Issue 12 Article Number 122004 Published DEC 8 2017 DOI 10.1103/PhysRevD.96.122004

159. [On the Progenitor of Binary Neutron Star Merger GW170817](#)

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL LETTERS Volume 850 Issue 2 Article Number L40 Published DEC 1 2017 DOI 10.3847/2041-8213/aa93fc

160. [Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817](#)

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL LETTERS Volume 850 Issue 2 Article Number L39 Published DEC 1 2017 DOI 10.3847/2041-8213/aa9478

161. [Search for High-energy Neutrinos from Binary Neutron Star Merger GW170817 with ANTARES, IceCube, and the Pierre Auger Observatory](#)

By ANTARES Collaboration; IceCube Collaboration; Pierre Auger Collaboration; et al.

ASTROPHYSICAL JOURNAL LETTERS Volume 850 Issue 2 Article Number L35 Published DEC 1 2017 DOI 10.3847/2041-8213/aa9aed

162. [A gravitational-wave standard siren measurement of the Hubble constant](#)

By LIGO Sci Collaboration; Virgo Collaboration; 1M2H Collaboration; et al.

NATURE Volume 551 Issue 7678 Pages 85-+ Published NOV 2 2017 DOI 10.1038/nature24471

163. [Multi-messenger Observations of a Binary Neutron Star Merger](#)

By LIGO Sci Collaboration & Virgo; Fermi GBM; INTEGRAL; et al.

ASTROPHYSICAL JOURNAL LETTERS Volume 848 Issue 2 Article Number L12 Published OCT 20 2017 DOI 10.3847/2041-8213/aa91c9

164. [Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger GW170817 and GRB 170817A](#)

By LIGO Sci Collaboration; Virgo Collaboration; Fermi Gamma-ray Burst Monitor; et al.

ASTROPHYSICAL JOURNAL LETTERS Volume 848 Issue 2 Article Number L13 Published OCT 20 2017 DOI 10.3847/2041-8213/aa920c

165. [Status of the Advanced Virgo gravitational wave detector](#)

By Acernese, F.; Adams, T.; Agatsuma, K.; et al.

INTERNATIONAL JOURNAL OF MODERN PHYSICS A Volume 32 Issue 28-29 Article Number 1744003 Published OCT 20 2017 DOI 10.1142/50217751X17440031

166. [GW170817 Observation of Gravitational Waves from a Binary Neutron Star Inspiral](#)

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW LETTERS Volume 119 Issue 16 Article Number 161101 Published OCT 16 2017 DOI 10.1103/PhysRevLett.119.161101

167. [GW170814 A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence](#)

By Abbott, B. P.; Abbott, R.; Abbott, T. D.; et al.

PHYSICAL REVIEW LETTERS Volume 119 Issue 14 Article Number 141101 Published OCT 6 2017 DOI 10.1103/PhysRevLett.119.141101

- 168. Upper Limits on Gravitational Waves from Scorpius X-1 from a Model-based Cross-correlation Search in Advanced LIGO Data**
By LIGO Sci Collaboration & Virgo
ASTROPHYSICAL JOURNAL Volume 847 Issue 1 Article Number 47 Published SEP 20 2017 DOI 10.3847/1538-4357/aa86f0
- 169. All-sky search for periodic gravitational waves in the O1 LIGO data**
By LIGO Scientific Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 96 Issue 6 Article Number 062002 Published SEP 12 2017 DOI 10.1103/PhysRevD.96.062002
- 170. Search for high-energy neutrinos from gravitational wave event GW151226 and candidate LVT151012 with ANTARES and IceCube**
By ANTARES Collaboration; IceCube Collaboration; LIGO Sci Collaboration; et al.
PHYSICAL REVIEW D Volume 96 Issue 2 Article Number 022005 Published JUL 12 2017 DOI 10.1103/PhysRevD.96.022005
- 171. Search for intermediate mass black hole binaries in the first observing run of Advanced LIGO**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 96 Issue 2 Article Number 022001 Published JUL 11 2017 DOI 10.1103/PhysRevD.96.022001
- 172. Search for gravitational waves from Scorpius X-1 in the first Advanced LIGO observing run with a hidden Markov model**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 95 Issue 12 Article Number 122003 Published JUN 27 2017 DOI 10.1103/PhysRevD.95.122003
- 173. Search for Gravitational Waves Associated with Gamma-Ray Bursts during the First Advanced LIGO Observing Run and Implications for the Origin of GRB 150906B**
By LIGO Sci Collaboration; Virgo Collaboration; IPN Collaboration
ASTROPHYSICAL JOURNAL Volume 841 Issue 2 Article Number 89 Published JUN 1 2017 DOI 10.3847/1538-4357/aa6c47
- 174. GW170104 Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2**
By LIGO Sci Virgo Collaboration
PHYSICAL REVIEW LETTERS Volume 118 Issue 22 Article Number 221101 Published JUN 1 2017 DOI 10.1103/PhysRevLett.118.221101
- 175. Quench Protection Study of the EuroCircol 16 T cos theta Dipole for the Future Circular Collider (FCC)**
By Marinozzi, Vittorio; Bellomo, Giovanni; Caiffi, Barbara; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 27 Issue 4 Article Number 4702505 Published JUN 2017 DOI 10.1109/TASC.2017.2656156
- 176. The EuroCirCol 16T Cosine-Theta Dipole Option for the FCC**
By Sorbi, Massimo; Bellomo, Giovanni; Caiffi, Barbara; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 27 Issue 4 Article Number 4001205 Published JUN 2017 DOI 10.1109/TASC.2016.2642982
- 177. The 16 T Dipole Development Program for FCC**
By Tommasini, Davide; Auchmann, B.; Bajas, Hugues; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 27 Issue 4 Article Number 4000405 Published JUN 2017 DOI 10.1109/TASC.2016.2634600
- 178. Effects of waveform model systematics on the interpretation of GW150914**
By LIGO Sci Collaboration; LIGO Sci Collaboration; Virgo Collaboration

- 179. Search for continuous gravitational waves from neutron stars in globular cluster NGC 6544**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 95 Issue 8 Article Number 082005 Published APR 19 2017 DOI
10.1103/PhysRevD.95.082005
- 180. First Search for Gravitational Waves from Known Pulsars with Advanced LIGO**
By LIGO Sci Collaboration; Virgo Collaboration
ASTROPHYSICAL JOURNAL Volume 839 Issue 1 Article Number 12 Published APR 10 2017 DOI 10.3847/1538-
4357/aa677f
- 181. Quench protection analysis integrated in the design of dipoles for the Future Circular Collider**
By Salmi, Tiina; Stenvall, Antti; Prioli, Marco; et al.
PHYSICAL REVIEW ACCELERATORS AND BEAMS Volume 20 Issue 3 Article Number 032401 Published MAR 27 2017
DOI 10.1103/PhysRevAccelBeams.20.032401
- 182. Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO's First Observing Run**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW LETTERS Volume 118 Issue 12 Article Number 121101 Published MAR 24 2017 DOI
10.1103/PhysRevLett.118.121101
- 183. Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW LETTERS Volume 118 Issue 12 Article Number 121102 Published MAR 24 2017 DOI
10.1103/PhysRevLett.118.121102
- 184. All-sky search for short gravitational-wave bursts in the first Advanced LIGO run**
By LIGO Sci Collaboration; VIRGO Collaboration
PHYSICAL REVIEW D Volume 95 Issue 4 Article Number 042003 Published FEB 16 2017 DOI
10.1103/PhysRevD.95.042003
- 185. The basic physics of the binary black hole merger GW150914**
By LIGO Sci Collaboration; LIGO Sci Collaboration; VIRGO Collaboration
ANNALEN DER PHYSIK Volume 529 Issue 1-2 Article Number 1600209 Published JAN 2017 DOI
10.1002/andp.201600209
- 186. Numerical modeling of critical-state magnetization in type-II superconducting cylinders under parallel and transverse magnetic field**
By Farinon, S.; Iannone, G.; Fabbriatore, P.; et al.
CRYOGENICS Volume 81 Pages 107-114 Published JAN 2017 DOI 10.1016/j.cryogenics.2016.11.001
- 2016**
- 187. The rate of binary black hole mergers inferred from advanced LIGO observations surrounding GW150914**
By LIGO Sci Collaboration; Virgo Collaboration
ASTROPHYSICAL JOURNAL LETTERS Volume 833 Issue 1 Article Number L1 Published DEC 10 2016 DOI
10.3847/2041-8205/833/1/L1
- 188. The Search for Sterile Neutrinos with SOX-Borexino**
By Altenmueller, K.; Agostini, M.; Appel, S.; et al.
PHYSICS OF ATOMIC NUCLEI Volume 79 Issue 11-12 Pages 1481-1484 Published DEC 2016 DOI
10.1134/S106377881610001X
- 189. Results of the deepest all-sky survey for continuous gravitational waves on LIGO S6 data running on the Einstein@Home volunteer distributed computing project**
By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW D Volume 94 Issue 10 Article Number 102002 Published NOV 18 2016 DOI
10.1103/PhysRevD.94.102002

190. [Localization and broadband follow-up of the gravitational-wave transient GW 150914](#)

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL LETTERS Volume 826 Issue 1 Article Number L13 Published JUL 20 2016 DOI
10.3847/2041-8205/826/1/L13

191. [Supplement "The rate of binary black hole mergers inferred from advanced LIGO observations surrounding GW150914" \(2016, APJL, 833,L1\)](#)

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES Volume 227 Issue 2 Article Number 14 Published DEC 2016 DOI
10.3847/0067-0049/227/2/14

192. [Upper limits on the rates of binary neutron star and neutron star-black hole mergers from advanced LIGO's first observing run](#)

By LIGO Scientific Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL LETTERS Volume 832 Issue 2 Article Number L21 Published DEC 1 2016 DOI
10.3847/2041-8205/832/2/L21

193. [First targeted search for gravitational-wave bursts from core-collapse supernovae in data of first-generation laser interferometer detectors](#)

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW D Volume 94 Issue 10 Article Number 102001 Published NOV 15 2016 DOI
10.1103/PhysRevD.94.102001

194. [Binary Black Hole Mergers in the First Advanced LIGO Observing Run](#)

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW X Volume 6 Issue 4 Article Number 041015 Published OCT 21 2016 DOI
10.1103/PhysRevX.6.041015

195. [Improved Analysis of GW150914 Using a Fully Spin-Precessing Waveform Model](#)

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW X Volume 6 Issue 4 Article Number 041014 Published OCT 21 2016 DOI
10.1103/PhysRevX.6.041014

196. [Directly comparing GW150914 with numerical solutions of Einstein's equations for binary black hole coalescence](#)

By LIGO Sci Collaboration, Virgo Collaboration

PHYSICAL REVIEW D Volume 94 Issue 6 Article Number 064035 Published SEP 14 2016 DOI
10.1103/PhysRevD.94.064035

197. [Supplement "Localization and broadband follow-up of the gravitational-wave transient GW150914" \(2016, APJL, 826, L3\)](#)

By LIGO Sci Collaboration Virgo Collaboration; ASKAP Collaboration; BOOTES Collaboration; et al.

ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES Volume 225 Issue 1 Article Number 8 Published JUL 2016 DOI
10.3847/0067-0049/225/1/8

198. [Comprehensive all-sky search for periodic gravitational waves in the sixth science run LIGO data](#)

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW D Volume 94 Issue 4 Article Number 042002 Published AUG 15 2016 DOI
10.1103/PhysRevD.94.042002

199. [A high precision calorimeter for the SOX experiment](#)

By Papp, L.; Agostini, M.; Altenmueller, K.; et al.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS

DETECTORS AND ASSOCIATED EQUIPMENT Volume 824 Pages 699-700 Published JUL 11 2016 DOI
10.1016/j.nima.2015.11.046

200. Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914

By LIGO Sci Collaboration; Virgo Collaboration

CLASSICAL AND QUANTUM GRAVITY Volume 33 Issue 13 Article Number 134001 Published JUL 7 2016 DOI
10.1088/0264-9381/33/13/134001

201. High-energy neutrino follow-up search of gravitational wave event GW150914 with ANTARES and IceCube

By ANTARES Collaboration; IceCube Collaboration; LIGO Sci Collaboration; et al.

PHYSICAL REVIEW D Volume 93 Issue 12 Article Number 122010 Published JUN 23 2016 DOI
10.1103/PhysRevD.93.122010

202. Search for transient gravitational waves in coincidence with short-duration radio transients during 2007-2013

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW D Volume 93 Issue 12 Article Number 122008 Published JUN 20 2016 DOI
10.1103/PhysRevD.93.122008

203. GW151226 Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW LETTERS Volume 116 Issue 24 Article Number 241103 Published JUN 15 2016 DOI
10.1103/PhysRevLett.116.241103

204. Properties of the Binary Black Hole Merger GW150914

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW LETTERS Volume 116 Issue 24 Article Number 241102 Published JUN 14 2016 DOI
10.1103/PhysRevLett.116.241102

205. GW150914 First results from the search for binary black hole coalescence with Advanced LIGO

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW D Volume 93 Issue 12 Article Number 122003 Published JUN 7 2016 DOI
10.1103/PhysRevD.93.122003

206. Observing gravitational-wave transient GW150914 with minimal assumptions

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW D Volume 93 Issue 12 Article Number 122004 Published JUN 7 2016 DOI
10.1103/PhysRevD.93.122004

207. Mu2e Transport Solenoid Prototype Design and Manufacturing

By Fabbriatore, P.; Ambrosio, G.; Cheban, S.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 26 Issue 4 Article Number 4500505 Published JUN
2016 DOI 10.1109/TASC.2016.2527502

208. Mu2e Transport Solenoid Prototype Tests Results

By Lopes, M.; Ambrosio, G.; Badgley, K.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 26 Issue 4 Article Number 4101105 Published JUN
2016 DOI 10.1109/TASC.2016.2526619

209. The Design of Superconducting Separation Dipoles D2 for the High Luminosity Upgrade of LHC

By Farinon, S.; Fabbriatore, P.; Curreli, S.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 26 Issue 4 Article Number 4001504 Published JUN
2016 DOI 10.1109/TASC.2016.2523060

210. Tests of General Relativity with GW150914

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW LETTERS Volume 116 Issue 22 Article Number 221101 Published MAY 31 2016 DOI
10.1103/PhysRevLett.116.221101

- 211. Composite superconducting wires for fast ramped magnets**
By Iannone, G.; Quero, F.; Gambardella, U.; et al.
COMPOSITES PART B-ENGINEERING Volume 90 Pages 133-140 Published APR 1 2016 DOI
10.1016/j.compositesb.2015.12.023
- 212. GW150914 Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW LETTERS Volume 116 Issue 13 Article Number 131102 Published MAR 31 2016 DOI
10.1103/PhysRevLett.116.131102
- 213. GW150914 The Advanced LIGO Detectors in the Era of First Discoveries**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW LETTERS Volume 116 Issue 13 Article Number 131103 Published MAR 31 2016 DOI
10.1103/PhysRevLett.116.131103
- 214. First low frequency all-sky search for continuous gravitational wave signals**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 93 Issue 4 Article Number 042007 Published FEB 25 2016 DOI
10.1103/PhysRevD.93.042007
- 215. Astrophysical implications of the binary black hole merger GW150914**
By Ligo Sci Collaboration; Virgo Collaboration
ASTROPHYSICAL JOURNAL LETTERS Volume 818 Issue 2 Article Number L22 Published FEB 20 2016 DOI
10.3847/2041-8205/818/2/L22
- 216. Search of the Orion spur for continuous gravitational waves using a loosely coherent algorithm on data from LIGO interferometers**
By Aasi, J.; Abbott, B. P.; Abbott, R.; et al.
PHYSICAL REVIEW D Volume 93 Issue 4 Article Number 042006 Published FEB 17 2016 DOI
10.1103/PhysRevD.93.042006
- 217. All-sky search for long-duration gravitational wave transients with initial LIGO**
By LIGO Sci Collaboration; LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 93 Issue 4 Article Number 042005 Published FEB 12 2016 DOI
10.1103/PhysRevD.93.042005
- 218. Search for sterile neutrinos with the SOX experiment**
By Caminata, A.; Agostini, M.; Altenmueller, K.; et al.
NUOVO CIMENTO C-COLLOQUIA AND COMMUNICATIONS IN PHYSICS Volume 39 Issue 1 Article Number 236
Published JAN-FEB 2016 DOI 10.1393/ncc/i2016-16236-7
- 219. Observation of Gravitational Waves from a Binary Black Hole Merger**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW LETTERS Volume 116 Issue 6 Article Number 061102 Published FEB 11 2016 DOI
10.1103/PhysRevLett.116.061102
- 220. Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo**
By LIGO Sci Collaboration; LIGO Sci Collaboration; Virgo Collaboration
LIVING REVIEWS IN RELATIVITY Volume 19 Pages 1-+ Published 2016 DOI 10.1007/lrr-2016-1
- 2015**
- 221. Searches for continuous gravitational waves from nine young supernova remnants**
By Aasi, J.; Abbott, B. P.; Abbott, R.; et al.
ASTROPHYSICAL JOURNAL Volume 813 Issue 1 Article Number 39 Published NOV 1 2015 DOI 10.1088/0004-637X/813/1/39

- 222. Experimental Study of the Mechanical Characteristics of SIS300 Cos-Theta Dipolar Coils**
By Farinon, S.; Fabbriatore, P.; Musenich, R.; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 25 Issue 2 Article Number 4003605 Published APR 2015 DOI 10.1109/TASC.2015.2396931
- 223. Directed search for gravitational waves from Scorpius X-1 with initial LIGO data**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 91 Issue 6 Article Number UNSP 062008 Published MAR 26 2015 DOI 10.1103/PhysRevD.91.062008
- 224. Modeling Experimental Magnetization Cycles of Thin Superconducting Strips by Finite-Element Simulations**
By Iannone, G.; Farinon, S.; De Marzi, G.; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 25 Issue 1 Article Number 8200107 Published FEB 2015 DOI 10.1109/TASC.2014.2345339
- 225. Advanced Virgo a second-generation interferometric gravitational wave detector**
By Virgo Collaboration
CLASSICAL AND QUANTUM GRAVITY Volume 32 Issue 2 Article Number UNSP 024001 Published JAN 22 2015 DOI 10.1088/0264-9381/32/2/024001
- 226. Narrow-band search of continuous gravitational-wave signals from Crab and Vela pulsars in Virgo VSR4 data**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 91 Issue 2 Article Number 022004 Published JAN 21 2015 DOI 10.1103/PhysRevD.91.022004
- 227. The SOX experiment in the neutrino physics**
By SOX Collaboration
NUOVO CIMENTO C-COLLOQUIA AND COMMUNICATIONS IN PHYSICS Volume 38 Issue 1 Article Number 36 Published JAN-FEB 2015 DOI 10.1393/ncc/i2015-15036-y
- 2014**
- 228. Improved Upper Limits on the Stochastic Gravitational-Wave Background from 2009-2010 LIGO and Virgo Data**
By LIGO and Virgo Collaboration
PHYSICAL REVIEW LETTERS Volume 113 Issue 23 Article Number 231101 Published DEC 2 2014 DOI 10.1103/PhysRevLett.113.231101
- 229. Multimessenger search for sources of gravitational waves and high-energy neutrinos Initial results for LIGO-Virgo and IceCube**
By IceCube Collaboration; LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 90 Issue 10 Article Number UNSP 102002 Published NOV 17 2014 DOI 10.1103/PhysRevD.90.102002
- 230. 2D and 3D numerical modeling of experimental magnetization cycles in disks and spheres**
By Farinon, S.; Iannone, G.; Fabbriatore, P.; et al.
SUPERCONDUCTOR SCIENCE & TECHNOLOGY Volume 27 Issue 10 Article Number 104005 Published OCT 2014 DOI 10.1088/0953-2048/27/10/104005
- 231. First all-sky search for continuous gravitational waves from unknown sources in binary systems**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 90 Issue 6 Published SEP 15 2014 DOI 10.1103/PhysRevD.90.062010
- 232. Implementation of an F-statistic all-sky search for continuous gravitational waves in Virgo VSR1 data**
By Virgo Collaboration
CLASSICAL AND QUANTUM GRAVITY Volume 31 Issue 16 Article Number 165014 Published AUG 21 2014 DOI 10.1088/0264-9381/31/16/165014

- 233. Reconstruction of the gravitational wave signal $h(t)$ during the Virgo science runs and independent validation with a photon calibrator**
By Virgo Collaboration
CLASSICAL AND QUANTUM GRAVITY Volume 31 Issue 16 Article Number 165013 Published AUG 21 2014 DOI 10.1088/0264-9381/31/16/165013
- 234. Progress and challenges in advanced ground-based gravitational-wave detectors**
By Virgo Collaboration
GENERAL RELATIVITY AND GRAVITATION Volume 46 Issue 8 Article Number 1749 Published AUG 2014 DOI 10.1007/s10714-014-1749-4
- 235. Search for Gravitational Waves Associated with gamma-ray Bursts Detected by the Interplanetary Network**
By LIGO Sci Collaboration; Virgo Collaboration; IPN Collaboration
PHYSICAL REVIEW LETTERS Volume 113 Issue 1 Article Number 011102 Published JUN 30 2014 DOI 10.1103/PhysRevLett.113.011102
- 236. Methods and results of a search for gravitational waves associated with gamma-ray bursts using the GEO 600, LIGO, and Virgo detectors**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 89 Issue 12 Article Number 122004 Published JUN 25 2014 DOI 10.1103/PhysRevD.89.122004
- 237. Search for gravitational radiation from intermediate mass black hole binaries in data from the second LIGO-Virgo joint science run**
By LIGO Sci Collaboration; Virgo Collaboration
PHYSICAL REVIEW D Volume 89 Issue 12 Article Number 122003 Published JUN 12 2014 DOI 10.1103/PhysRevD.89.122003
- 238. The NINJA-2 project detecting and characterizing gravitational waveforms modelled using numerical binary black hole simulations**
By Virgo Collaboration
CLASSICAL AND QUANTUM GRAVITY Volume 31 Issue 11 Article Number 115004 Published JUN 7 2014 DOI 10.1088/0264-9381/31/11/115004
- 239. An Experimental Study of Fine Filaments NbTi Strand for Fast Cycled Magnets**
By Gambardella, U.; Alessandria, F.; Bellomo, G.; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 24 Issue 3 Article Number 6000404 Published JUN 2014 DOI 10.1109/TASC.2013.2281465
- 240. Next Generation of Fast-Cycled Dipoles for SIS300 Synchrotron**
By Mueller, H.; Alessandria, F.; Bellomo, G.; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 24 Issue 3 Article Number 4004204 Published JUN 2014 DOI 10.1109/TASC.2013.2287635
- 241. A Magnesium Diboride Superconducting Toroid for Astroparticle Shielding**
By Musenich, R.; Calvelli, V.; Farinon, S.; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 24 Issue 3 Article Number 4601504 Published JUN 2014 DOI 10.1109/TASC.2013.2287047
- 242. Measurements and Analysis of the SIS-300 Dipole Prototype During the Functional Test at LASA**
By Sorbi, M.; Alessandria, F.; Baldessari, G.; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 24 Issue 3 Article Number 4002205 Published JUN 2014 DOI 10.1109/TASC.2013.2283814
- 243. AC Losses Measurement of the DISCORAP Model Dipole Magnet for the SIS300 Synchrotron at FAIR**
By Volpini, G.; Alessandria, F.; Bellomo, G.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 24 Issue 3 Article Number 4000205 Published JUN 2014 DOI 10.1109/TASC.2013.2280733

244. Search for gravitational wave ringdowns from perturbed intermediate mass black holes in LIGO-Virgo data from 2005-2010

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW D Volume 89 Issue 10 Article Number 102006 Published MAY 27 2014 DOI 10.1103/PhysRevD.89.102006

245. Application of a Hough search for continuous gravitational waves on data from the fifth LIGO science run

By LIGO Sci Collaboration; Virgo Collaboration

CLASSICAL AND QUANTUM GRAVITY Volume 31 Issue 8 Article Number 085014 Published APR 21 2014 DOI 10.1088/0264-9381/31/8/085014

246. Gravitational waves from known pulsars results from the initial detector era

By LIGO Sci Collaboration; Virgo Collaboration

ASTROPHYSICAL JOURNAL Volume 785 Issue 2 Article Number 119 Published APR 20 2014 DOI 10.1088/0004-637X/785/2/119

247. Constraints on Cosmic Strings from the LIGO-Virgo Gravitational-Wave Detectors

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW LETTERS Volume 112 Issue 13 Article Number 131101 Published APR 4 2014 DOI 10.1103/PhysRevLett.112.131101

2013

248. Search for long-lived gravitational-wave transients coincident with long gamma-ray bursts

By LIGO Sci Collaboration; Virgo Collaboration

PHYSICAL REVIEW D Volume 88 Issue 12 Article Number UNSP 122004 Published DEC 13 2013 DOI 10.1103/PhysRevD.88.122004

249. Experimental investigation of the transverse resistivity in Nb₃Sn wires through ac susceptibility

By Fabbicatore, P.; Farinon, S.; Corato, V.; et al.

SUPERCONDUCTOR SCIENCE & TECHNOLOGY Volume 26 Issue 8 Article Number 085001 Published AUG 2013 DOI 10.1088/0953-2048/26/8/085001

250. Superconducting Magnets for Astroparticle Shielding in Interplanetary Manned Missions

By Battiston, R.; Burger, W. J.; Calvelli, V.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 23 Issue 3 Article Number 4101604 Part 2 Published JUN 2013 DOI 10.1109/TASC.2013.2239333

251. Compact Superconducting High Gradient Quadrupole Magnets for the Interaction Regions of High Luminosity Colliders

By Bosi, F.; Fabbicatore, P.; Farinon, S.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 23 Issue 3 Article Number 4001004 Part 2 Published JUN 2013 DOI 10.1109/TASC.2012.2231716

252. The Curved Fast Ramped Superconducting Dipoles for FAIR SIS300 Synchrotron From First Model to Future Developments

By Fabbicatore, P.; Alessandria, F.; Bellomo, G.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 23 Issue 3 Article Number 4000505 Part 2 Published JUN 2013 DOI 10.1109/TASC.2012.2229332

253. The Functional Test of the SIS300 Model Dipole at INFN-LASA

By Sorbi, M.; Alessandria, F.; Bellomo, G.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 23 Issue 3 Article Number 4000304 Part 2 Published JUN 2013 DOI 10.1109/TASC.2012.2229771

254. Superconductor/ferromagnet heterostructures exhibit potential for significant reduction of hysteretic losses

By Krueger, P.; Grilli, F.; Vojenciak, M.; et al.

APPLIED PHYSICS LETTERS Volume 102 Issue 20 Article Number 202601 Published MAY 20 2013 DOI 10.1063/1.4807136

2012

255. A New Boson with a Mass of 125 GeV Observed with the CMS Experiment at the Large Hadron Collider

By CMS Collaboration

SCIENCE Volume 338 Issue 6114 Pages 1569-1575 Published DEC 21 2012 DOI 10.1126/science.1230816

256. Applicability of the Adaptive Resistivity Method to Describe the Critical State of Complex Superconducting Systems

By Farinon, S.; Fabbriatore, P.; Grilli, F.; et al.

JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM Volume 25 Issue 7 Pages 2343-2350 Published OCT 2012 DOI 10.1007/s10948-012-1682-2

257. Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC

By CMS Collaboration

PHYSICS LETTERS B Volume 716 Issue 1 Pages 30-61 Published SEP 17 2012 DOI 10.1016/j.physletb.2012.08.021

258. Design, Construction and Test of a Model Superconducting Quadrupole for the Interaction Region of Super B Factory

By Bosi, F.; Paoloni, E.; Fabbriatore, P.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 22 Issue 3 Article Number 4000104 Published JUN 2012 DOI 10.1109/TASC.2011.2179389

259. Refined modeling of superconducting double helical coils using finite element analyses

By Farinon, S.; Fabbriatore, P.

SUPERCONDUCTOR SCIENCE & TECHNOLOGY Volume 25 Issue 6 Article Number 065006 Published JUN 2012 DOI 10.1088/0953-2048/25/6/065006

2011

260. Compliance of numerical formulations for describing superconductor/ferromagnet heterostructures

By Krueger, P. A. C.; Grilli, F.; Farinon, S.

PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS Volume 471 Issue 21-22 Pages 1083-1085 Published NOV 2011 DOI 10.1109/TASC.2010.2084553

261. A Model Dipole for FAIR SIS300 3D Design of the Mechanical Structure

By Farinon, S.; Fabbriatore, P.; Musenich, R.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 21 Issue 3 Pages 1804-1807 Part 2 Published JUN 2011 DOI 10.1109/TASC.2010.2084553

262. The Preparation of the LASA Test Station for the SIS300 Model Dipole

By Sorbi, M.; Alessandria, F.; Bellomo, G.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 21 Issue 3 Pages 1808-1812 Part 2 Published JUN 2011 DOI 10.1109/TASC.2010.2089417

263. The Construction of the Model of the Curved Fast Ramped Superconducting Dipole for FAIR SIS300 Synchrotron

By Fabbriatore, P.; Alessandria, F.; Bellomo, G.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 21 Issue 3 Pages 1863-1867 Part 2 Published JUN 2011 DOI 10.1109/TASC.2010.2089951

264. Low Loss Nb-Ti Superconducting Rutherford Cable Manufacture for the SIS300 INFN Model Dipole

By Volpini, G.; Alessandria, F.; Bellomo, G.; et al.

2010

265. Critical state and magnetization loss in multifilamentary superconducting wire solved through the commercial finite element code ANSYS

By Farinon, S.; Fabbriatore, P.; Goemoery, F.

SUPERCONDUCTOR SCIENCE & TECHNOLOGY Volume 23 Issue 11 Article Number 115004 Published NOV 2010 DOI 10.1088/0953-2048/23/11/115004

2009

266. The transverse resistivity in S/C multifilament wires studied through ac susceptibility measurements

By Fabbriatore, P.; Farinon, S.; Incardone, S.; et al.

JOURNAL OF APPLIED PHYSICS Volume 106 Issue 8 Article Number 083905 Published OCT 15 2009 DOI 10.1063/1.3234378

267. Electromagnetic Design of the Coil-Ends for the FAIR SIS300 Model Dipole

By Sorbi, M.; Alessandria, F.; Bellomo, G.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 19 Issue 3 Pages 1131-1135 Published JUN 2009 DOI 10.1109/TASC.2009.2018784

268. A Model Dipole for FAIR SIS300 Design of the Mechanical Structure

By Farinon, S.; Fabbriatore, P.; Musenich, R.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 19 Issue 3 Pages 1141-1145 Published JUN 2009 DOI 10.1109/TASC.2009.2017944

2008

269. The CMS experiment at the CERN LHC

By CMS Collaboration

JOURNAL OF INSTRUMENTATION Volume 3 Article Number S08004 Published AUG 2008 DOI 10.1088/1748-0221/3/08/S08004

270. Field quality and losses for the 4.5 T superconducting pulsed dipole of SIS300

By Sorbi, M.; Alessandria, F.; Bellomo, G.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 18 Issue 2 Pages 138-141 Published JUN 2008 DOI 10.1109/TASC.2008.921320

271. Development of a curved fast ramped dipole for FAIR SIS300

By Fabbriatore, R.; Alessandria, F.; Bellomo, G.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 18 Issue 2 Pages 232-235 Published JUN 2008 DOI 10.1109/TASC.2008.922291

272. Nb3Sn wire layout optimization to reduce cabling degradation

By Farinon, S.; Boutboul, T.; Devred, A.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 18 Issue 2 Pages 984-988 Published JUN 2008 DOI 10.1109/TASC.2008.922299

273. Low-loss NbTi Rutherford cable for application to the SIS-300 dipole magnet prototype

By Volpini, G.; Alessandria, F.; Bellomo, G.; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 18 Issue 2 Pages 997-1000 Published JUN 2008 DOI 10.1109/TASC.2008.922516

2007

- 274. Magnet design and optimization The INFN-Genova experience using ANSYS**
By Farinon, S.
CRYOGENICS Volume 47 Issue 11-12 Pages 577-582 Published NOV-DEC 2007 DOI 10.1016/j.cryogenics.2007.08.007
- 275. CMS physics technical design report Addendum on high density QCD with heavy ions**
By CMS Collaboration
JOURNAL OF PHYSICS G-NUCLEAR AND PARTICLE PHYSICS Volume 34 Issue 11 Pages 2307-2455 Published NOV 2007
DOI 10.1088/0954-3899/34/11/008
- 276. Finite element model to study the deformations of Nb3SR wires for the next European dipole (NED)**
By Farinon, S.; Boutboul, T.; Devred, A.; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 17 Issue 2 Pages 1136-1139 Part 2 Published JUN 2007 DOI 10.1109/TASC.2007.899138
- 277. Commissioning of the CMS magnet**
By Campi, D.; Cure, B.; Gaddi, A.; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 17 Issue 2 Pages 1185-1190 Part 2 Published JUN 2007 DOI 10.1109/TASC.2007.897754
- 278. The physical connection and magnetic coupling of the MICE cooling channel magnets and. the magnet forces for various MICE operating modes**
By Yang, S. Q.; Baynham, D. E.; Fabricatore, P.; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 17 Issue 2 Pages 1225-1228 Part 2 Published JUN 2007 DOI 10.1109/TASC.2007.899694
- 279. CMS physics technical design report, volume II Physics performance**
By CMS Collaboration
JOURNAL OF PHYSICS G-NUCLEAR AND PARTICLE PHYSICS Volume 34 Issue 6 Pages 995-1579 Published JUN 2007
DOI 10.1088/0954-3899/34/6/S01

2006

- 280. The manufacture of modules for CMS coil**
By Fabbicatore, P.; Campi, D.; D'Urzo, C.; et al.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 16 Issue 2 Pages 512-516 Published JUN 2006 DOI 10.1109/TASC.2005.869550
- 281. Rapid cycling superconducting magnets**
By Fabbicatore, P; Farinon, S; Gambardella, U; et al.
NUCLEAR PHYSICS B-PROCEEDINGS SUPPLEMENTS Volume 154 Pages 157-162 Published APR 2006 DOI 10.1016/j.nuclphysbps.2006.01.051
- 282. Overview and status of the Next European Dipole Joint Research Activity**
By Devred, A; Baudouy, B; Baynham, DE; et al.
SUPERCONDUCTOR SCIENCE & TECHNOLOGY Volume 19 Issue 3 Special Issue SI Pages S67-S83 Published MAR 2006
DOI 10.1088/0953-2048/19/3/010
- 283. Predicting AC loss in practical superconductors**
By Gomory, F; Souc, J; Wojenciak, M; et al.
SUPERCONDUCTOR SCIENCE & TECHNOLOGY Volume 19 Issue 3 Special Issue SI Pages S60-S66 Published MAR 2006
DOI 10.1088/0953-2048/19/3/009
- 284. The behaviour of cryogen-free MgB2 react and wind coils**
By Musenich, R; Fabbicatore, P; Farinon, S; et al.
SUPERCONDUCTOR SCIENCE & TECHNOLOGY Volume 19 Issue 3 Special Issue SI Pages S126-S131 Published MAR 2006 DOI 10.1088/0953-2048/19/3/018

2005

285. Status of the next European Dipole (NED) activity of the Collaborated Accelerator Research in Europe (CARE) project

By Devred, A; Baudouy, B; Baynham, DE; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 15 Issue 2 Pages 1106-1112 Part 2 Published JUN 2005 DOI 10.1109/TASC.2005.849506

286. The mechanical and thermal design for the MICE detector solenoid magnet system

By Fabbriatore, P; Farinon, S; Perrella, A; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 15 Issue 2 Pages 1255-1258 Part 2 Published JUN 2005 DOI 10.1109/TASC.2005.849554

287. Electrical characterization of S/C conductor for the CMS solenoid

By Fabbriatore, P; Greco, M; Musenich, R; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 15 Issue 2 Pages 1275-1278 Part 2 Published JUN 2005 DOI 10.1109/TASC.2005.849566

288. Behavior of MgB₂ react & wind coils above 10 K

By Musenich, R; Fabbriatore, P; Farinon, S; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 15 Issue 2 Pages 1452-1456 Part 2 Published JUN 2005 DOI 10.1109/TASC.2005.849125

289. Modeling of current density distributions in critical state by commercial FE codes

By Farinon, S; Fabbriatore, P; Gomory, F; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 15 Issue 2 Pages 2867-2870 Part 3 Published JUN 2005 DOI 10.1109/TASC.2005.848250

2004

290. Status of the construction of the CMS magnet

By Herve, A; Blau, B; Bredy, PH; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 14 Issue 2 Special Issue SI Pages 542-547 Published JUN 2004 DOI 10.1109/TASC.2004.829715

291. The construction of the modules composing the CMS superconducting coil

By Fabbriatore, P; Campi, D; D'Urzo, C; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 14 Issue 2 Special Issue SI Pages 552-555 Published JUN 2004 DOI 10.1109/TASC.2004.829717

292. The winding method and model of a superconducting bending dipole for hadrontherapy

By Farinon, S; Cereseto, R; Cuneo, S; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 14 Issue 2 Special Issue SI Pages 585-588 Published JUN 2004 DOI 10.1109/TASC.2004.829980

293. The influence of filament arrangement on current distribution and AC loss in Bi-2223/Ag tapes

By Gomory, F; Seiler, E; Souc, J; et al.

SUPERCONDUCTOR SCIENCE & TECHNOLOGY Volume 17 Issue 5 Special Issue SI Pages S150-S154 Article Number PII S0953-2048(04)71825-4 Published MAY 2004 DOI 10.1088/0953-2048/17/5/012

294. A superconducting cyclotron as driver for radioactive beam facilities

By Calabretta, L; Maggiore, M; Re, M; et al.

NUCLEAR PHYSICS A Volume 734 Pages 378-381 Published APR 5 2004 DOI 10.1016/j.nuclphysa.2004.01.072

295. Critical current and n-value modifications from superconducting strands to Rutherford cables

By Greco, M; Fabbriatore, P; Farinon, S; et al.

PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS Volume 401 Issue 1-4 Pages 124-128 Published JAN 15 2004 DOI 10.1016/j.physc.2003.09.022

296. Determination of the V-I characteristic of NbTi wires in a wide resistivity range

By Musenich, R; Fabbriatore, P; Farinon, S; et al.

PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS Volume 401 Issue 1-4 Pages 260-264 Published JAN 15 2004 DOI 10.1016/j.physc.2003.09.050

2003

297. Generation of higher harmonics in voltage on superconducting wire carrying cosine-like AC current

By Gomory, F; Tebano, R; Souc, J; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 13 Issue 2 Pages 3622-3625 Part 3 Published JUN 2003 DOI 10.1109/TASC.2003.812413

2002

298. Magnetic hysteresis loss in Bi-2223/Ag tapes with different filament arrangement

By Gomory, F; Souc, J; Fabbriatore, P; et al.

PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS Volume 371 Issue 3 Pages 229-236 Article Number PII S0921-4534(01)01089-9 Published JUL 1 2002 DOI 10.1016/S0921-4534(01)01089-9

299. Measurement of B -> K-* gamma branching fractions and charge asymmetries

By BABAR Collaboration

PHYSICAL REVIEW LETTERS Volume 88 Issue 10 Article Number 101805 Published MAR 11 2002 DOI 10.1103/PhysRevLett.88.101805

300. The winding line for the CMS reinforced conductor

By Fabbriatore, P; Campi, D; D'Urzo, C; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 12 Issue 1 Pages 358-361 Article Number PII S1051-8223(02)03563-7 Published MAR 2002 DOI 10.1109/TASC.2002.1018419

301. CMS coil design and assembly

By Kircher, F; Bredy, P; Campi, D; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 12 Issue 1 Pages 395-398 Article Number PII S1051-8223(02)03570-4 Published MAR 2002 DOI 10.1109/TASC.2002.1018427

302. Design, construction, and quality tests of the large Al-alloy mandrels for the CMS coil

By Sgobba, S; D'Urzo, C; Fabbriatore, P; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 12 Issue 1 Pages 428-431 Article Number PII S1051-8223(02)03578-9 Published MAR 2002 DOI 10.1109/TASC.2002.1018436

303. Electrical joints in the CMS superconducting magnet

By Farinon, S; Chesny, P; Cure, B; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 12 Issue 1 Pages 462-464 Article Number PII S1051-8223(02)03584-4 Published MAR 2002 DOI 10.1109/TASC.2002.1018443

304. A superconducting magnet for a beam delivery system for carbon ion cancer therapy

By Priano, C; Fabbriatore, P; Farinon, S; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 12 Issue 1 Pages 988-992 Article Number PII S1051-8223(02)03872-1 Published MAR 2002 DOI 10.1109/TASC.2002.1018566

305. A volumized fiber-glass insulation for large superconducting magnets

By Musenich, R; D'Urzo, C; Fabbriatore, P; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 12 Issue 1 Pages 1242-1243 Article Number PII S1051-8223(02)04169-6 Published MAR 2002 DOI 10.1109/TASC.2002.1018626

306. The BABAR detector

By BABAR Collaboration

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS

307. Measurement of branching fractions for exclusive B decays to charmonium final states

By BABAR Collaboration

PHYSICAL REVIEW D Volume 65 Issue 3 Article Number 032001 Published FEB 1 2002 DOI 10.1103/PhysRevD.65.032001

2001

308. Measurement of the $B \rightarrow J/\psi K^*(892)$ decay amplitudes

By BABAR Collaboration

PHYSICAL REVIEW LETTERS Volume 87 Issue 24 Article Number 241801 Published DEC 10 2001 DOI 10.1103/PhysRevLett.87.241801

309. Search for the decay $B-0 \rightarrow \gamma \gamma$

By BABAR Collaboration

PHYSICAL REVIEW LETTERS Volume 87 Issue 24 Article Number 241803 Published DEC 10 2001 DOI 10.1103/PhysRevLett.87.241803

310. Measurements of the branching fractions of exclusive charmless B meson decays with η' or omega mesons

By BABAR Collaboration

PHYSICAL REVIEW LETTERS Volume 87 Issue 22 Pages art. no.-221802 Published NOV 26 2001 DOI 10.1103/PhysRevLett.87.221802

311. Measurement of the B-0 and B+ meson lifetimes with fully reconstructed hadronic final states

By BABAR Collaboration

PHYSICAL REVIEW LETTERS Volume 87 Issue 20 Article Number 201803 Published NOV 12 2001 DOI 10.1103/PhysRevLett.87.201803

312. Measurement of J/ψ production in continuum e^+e^- annihilations near $\sqrt{s}=10.6$ GeV

By BABAR Collaboration

PHYSICAL REVIEW LETTERS Volume 87 Issue 16 Article Number 162002 Published OCT 15 2001 DOI 10.1103/PhysRevLett.87.162002

313. Measurement of branching fractions and search for CP-violating charge asymmetries in charmless two-body B decays into pions and kaons

By BABAR Collaboration

PHYSICAL REVIEW LETTERS Volume 87 Issue 15 Article Number 151802 Published OCT 8 2001 DOI 10.1103/PhysRevLett.87.151802

314. Measurement of the decays $B \rightarrow \phi K$ and $B \rightarrow \phi K - 151801$

By BABAR Collaboration

PHYSICAL REVIEW LETTERS Volume 87 Issue 15 Article Number 151801 Published OCT 8 2001 DOI 10.1103/PhysRevLett.87.151801

315. Observation of CP violation in the B-0 meson system

By BABAR Collaboration

PHYSICAL REVIEW LETTERS Volume 87 Issue 9 Article Number 091801 Published AUG 27 2001 DOI 10.1103/PhysRevLett.87.091801

316. Pre-industrialization activities related to CMS coil winding

By Fabbicatore, P; Farinon, S; Musenich, R; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 11 Issue 1 Pages 1717-1720 Part 2 Published MAR 2001 DOI 10.1109/77.920114

317. Shielding and losses in multifilamentary tapes exposed to perpendicular AC magnetic fields

By Farinon, S; Fabbicatore, P; Gomory, F; et al.

2000

318. Ac losses in multifilamentary high-T-c tapes due to a perpendicular ac magnetic field

By Fabbriatore, P; Farinon, S; Gomory, F; et al.

SUPERCONDUCTOR SCIENCE & TECHNOLOGY Volume 13 Issue 9 Pages 1327-1337 Published SEP 2000 DOI 10.1088/0953-2048/13/9/308

319. Final design of the CMS solenoid cold mass

By Kircher, F; Bredy, P; Calvo, A; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 10 Issue 1 Pages 407-410 Published MAR 2000 DOI 10.1109/77.828259

320. Finite element stress analysis of the CMS magnet coil

By Desirelli, A; Fabbriatore, P; Farinon, S; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 10 Issue 1 Pages 419-423 Published MAR 2000 DOI 10.1109/77.828262

321. Experimental study of CMS conductor stability

By Fabbriatore, P; Farinon, S; Juster, FP; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 10 Issue 1 Pages 424-427 Published MAR 2000 DOI 10.1109/77.828263

322. 3D magnetic analysis of the CMS magnet

By Klioukhine, VI; Campi, D; Cure, B; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 10 Issue 1 Pages 428-431 Published MAR 2000 DOI 10.1109/77.828264

323. Magnetic flux shielding in superconducting strip arrays

By Fabbriatore, P; Farinon, S; Innocenti, S; et al.

PHYSICAL REVIEW B Volume 61 Issue 9 Pages 6413-6421 Published MAR 1 2000 DOI 10.1103/PhysRevB.61.6413

324. Evolution of the ohmic voltage drop in connections of superconductors under time-varying current

By Musenich, R; Farinon, S; Priano, C; et al.

CRYOGENICS Volume 40 Issue 1 Pages 45-52 Published JAN 2000 DOI 10.1016/S0011-2275(00)00002-3

1999

325. The BaBar superconducting coil design, construction and test

By Bell, RA; Berndt, M; Burgess, W; et al.

NUCLEAR PHYSICS B-PROCEEDINGS SUPPLEMENTS Volume 78 Pages 559-564 Published AUG 1999 DOI 10.1016/S0920-5632(99)00603-9

326. Developments of electrical joints for aluminum-stabilized superconducting cables

By Fabbriatore, P; Farinon, S; Musenich, R; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 9 Issue 2 Pages 197-200 Part 1 Published JUN 1999

327. Design and testing of the 1.5 T superconducting solenoid for the BaBar Detector at PEP-II in SLAC

By O'Connor, TG; Shen, S; Fabbriatore, P; et al.

IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY Volume 9 Issue 2 Pages 847-851 Part 1 Published JUN 1999 DOI 10.1109/77.783429

1996

328. The superconducting magnet for the BABAR detector of the PEP-II B factory at SLAC

By Fabbriatore, P; Farinon, S; Parodi, R; et al.

1994

329. Fluxon dynamics and higher harmonics of ac susceptibility in HTSC

By Fabbriatore, P; Farinon, S; Gemme, G; et al.

NUOVO CIMENTO DELLA SOCIETA ITALIANA DI FISICA D-CONDENSED MATTER ATOMIC MOLECULAR AND CHEMICAL
PHYSICS FLUIDS PLASMAS BIOPHYSICS Volume 16 Issue 10-11 Pages 1917-1924 Published OCT-NOV 1994 DOI
10.1007/BF02462194

330. Effects of fluxon dynamics on higher harmonics of ac susceptibility in type-II superconductors

By Fabbriatore, P; Farinon, S; Gemme, G; et al.

PHYSICAL REVIEW B Volume 50 Issue 5 Pages 3189-3199 Published AUG 1 1994 DOI 10.1103/PhysRevB.50.3189

1993

331. AC magnetic measurements on superconductors using 2-channel dynamic analyzer

By Fabbriatore, P; Farinon, S; Gemme, G; et al.

CRYOGENICS Volume 33 Issue 12 Pages 1170-1173 Published DEC 1993 DOI 10.1016/0011-2275(93)90013-E

Curriculum Vitae - 14 Novembre 2025

Stefano Davini

via Dodecaneso 33
16131 Genova

Esperienze lavorative:

- Primo ricercatore presso Istituto Nazionale di Fisica Nucleare Sezione Genova (Novembre 2024 - presente)
- Ricercatore terzo livello presso Istituto Nazionale di Fisica Nucleare Sezione Genova (Marzo 2017 - Ottobre 2024)
- Post doc fellowship presso Gran Sasso Science Institute (L'Aquila, Marzo 2015 - Febbraio 2017)
- Research Associate 2 presso University of Houston (Houston, USA, TX, Aprile 2012 - Febbraio 2015)

Formazione:

- Dottorato di Ricerca in Fisica presso Università degli Studi di Genova, titolo tesi *Measurement of the pep and CNO solar neutrino interaction rates in Borexino* (2009-2012)
- Laurea Specialistica in Fisica 110/110 cum laudae presso Università degli Studi di Genova, titolo tesi *Sviluppo, installazione e test di un sistema di acquisizione per neutroni da spallazione in Borexino* (2006-2008)
- Laurea Triennale in Fisica 110/110 presso Università degli Studi di Genova (2003-2006)

Attività di Ricerca:

La mia attività di ricerca è focalizzata sui progetti DarkSide, Euclid e Borexino.

DarkSide è un progetto di ricerca che ha come scopo la rivelazione diretta di particelle WIMP di materia oscura mediante *scattering* elastico con rivelatori TPC in Argon.

Euclid è una missione spaziale ESA che ha come scopo lo studio dell'evoluzione dell'universo. Il programma di fisica fondamentale di Euclid include la caratterizzazione dell'equazione di stato dell'Energia Oscura e la misura indiretta della massa dei neutrini.

Incarichi di responsabilità:

- Responsabile locale INFN Euclid nella Sezione Genova (2019-presente)
- Responsabile locale sigla terza missione INFN Dark (2024-presente)
- Responsabile infrastruttura software produzione e qualifica dei fotosensori di DarkSide-20k in NOA (2022-presente)
- Coordinatore Editorial Board in DarkSide (2019-2021)
- L2 manager per lo Slow Control in DarkSide-ReD (2018-2022)
- Responsabile locale INFN DarkSide nella Sezione di Genova (2017-2018)
- Coordinatore analisi veto dei neutroni in DarkSide-50 (2014-2018)

Presentazioni a conferenze recenti:

- RICAP24 - Rome International Conference for AstroParticle Physics (Frascati, 24 Settembre 2024)
- TeVPA23 - TeV Particle Astrophysics (Napoli, 11-15 Settembre 2023)
- XeSAT22 - International WorkShop on Application of Noble Gas Xenon to Science and Technology (Coimbra, 20 Maggio 2022)
- LDMA19 - Light Dark Matter 2019 (Venezia, 20 Novembre 2019)

Grant:

- Attribuzione Grant PRIN 20222JBEKN progetto LaScaLa - Large Scale Lab
- Attribuzione Grant INFN n.19593 progetto PESCE insieme ai dott. M. Biassoni, A. Caminata, A. Celentano

Outreach:

- Festival della Comunicazione 2023 (Camogli)
- Sumo Science 2024 e 2022 (Genova)
- FameLab Italia 2022 (Genova)
- Notte Europea dei ricercatori SHARPER Night 2021 (Genova)

Attività didattiche:

- Supervisore studenti di dottorato: Marco Bonici, Luca Paganin (UNIGE)
- Co-Relatore studenti di laurea magistrale: Ilaria Risso, Fabrizio Verdesi (UNIGE)
- Lezione a contratto nel ciclo “L’Universo Oscuro” per IANUA - Scuola Superiore dell’Università di Genova (2024-2022)
- Professore a contratto per il Corso Fisica Sperimentale con applicazioni al Sistema Terra - Scienze Geologiche (UNIGE, aa 2019-20, 2020-21, 2021-22, 2022-23)
- Professore a contratto per il Corso Fisica Generale con Laboratorio - Chimica e Tecnologie Chimiche (UNIGE, aa 2020-21)

Pubblicazioni:

Più di 150 pubblicazioni su riviste peer-reviewed. H-index 34.

Pubblicazioni recenti selezionate:

1. **Quality assurance and quality control of the 26 m² SiPM production for the DarkSide-20k dark matter experiment**, DarkSide-20k Collaboration, Eur.Phys.J. C 85 (2025), 534 DOI10.1140/epjc/s10052-025-14196-9
2. **DarkSide-20k sensitivity to light dark matter particles**, DarkSide-20k Collaboration, Communication Physics 7 (2024) 422 DOI10.1038/s42005-024-01896-z
3. **Constraints on directionality effect of nuclear recoils in a liquid argon time projection chamber**, DarkSide-20k Collaboration, Eur.Phys.J. C 84 (2024) DOI10.1140/epjc/s10052-023-12312-1
4. **Euclid: Forecasts from the void-lensing cross-correlation**, Euclid Collaboration, A&A 670 (2023) A47 DOI [10.1051/0004-6361/202244445](https://doi.org/10.1051/0004-6361/202244445)
5. **Characterization of the performances of commercial plastic scintillators in cryogenic environments**, M. Biassoni et al, JINST 18 (2023) P05036 DOI [10.1088/1748-0221/18/05/P05036](https://doi.org/10.1088/1748-0221/18/05/P05036)
6. **Search for low-mass dark matter WIMPs with 12 ton-day exposure of DarkSide-50**, DarkSide-50 Collaboration, Phys. Rev. D 107 (2023) 063001 DOI10.1103/PhysRevD.107.063001
7. **Search for Dark Matter Particle Interactions with Electronic Final States with DarkSide-50**, DarkSide-50 Collaboration, Phys. Rev. Lett 130 (2023) 101002 DOI10.1103/PhysRevLett.130.101002
8. **Search for Dark-Matter-Nucleon Interactions via Migdal Effect with DarkSide-50**, DarkSide-50 Collaboration, Phys. Rev. Lett. 130 (2023) 101001 DOI10.1103/PhysRevLett.130.101001

9. **Euclid preparation XVIII. The NISP photometric system**, Euclid Collaboration, A&A662 (2022) A92
DOI10.1051/0004-6361/202142897
10. **First Directional Measurement of Sub-MeV Solar Neutrinos with Borexino**, Borexino Collaboration, Phys. Rev Lett. 128 (2022) 091803 DOI10.1103/PhysRevLett.128.091803
11. **Calibration of the liquid argon ionization response to low energy electronic and nuclear recoils with DarkSide-50**, DarkSide Collaboration, Phys. Rev. D 104 (2021) 082005
12. **Experimental evidence of neutrinos produced in the CNO fusion cycle in the Sun**, Borexino Collaboration, Nature 587 (2020) 577 DOI: 10.1038/s41586-020-2934-0
13. **DarkSide-50 532-day dark matter search with low-radioactivity argon**, DarkSide Collaboration, Phys. Rev. D 98 (2018) 102006
14. **Comprehensive measurement of pp-chain solar neutrinos**, Borexino Collaboration, Nature 562 (2018) 505

Con i migliori saluti,

Stefano Davini