#### Breve curriculum professionale di Paolo Musico

Laurea in Ingegneria Elettronica conseguita nel giugno 1989 presso l'Universita' degli studi di Genova e successivo Esame di Stato per l'abilitazione all' Esercizio della professione di Ingegnere.

Dipendente presso la Marconi Italiana SpA di Genova dal 1/9/1989 al 31/12/1991.

Dipendente presso l' I.N.F.N. sezione di Genova dal 7/1/1992 e responsabile del Servizio di Elettronica dal settembre 1994. Inquadrato come I tecnologo dal 16 dicembre 2005 al 31 dicembre 2020. Inquadrato come dirigente tecnologo dal 1 gennaio 2021 a tutt' oggi.

Competenze:

- sviluppo di sistemi multicanale di front-end, acquisizione dati e trigger per esperimenti in ambito INFN;
- conoscenza di linguaggi HDL per sviluppi di FPGA e ASIC digitali;
- conoscenza di linguaggi di programmazione ad alto livello C, C++;
- conoscenza dei principali bus standard: VME (VME64x), USB (2.0), PCI e altri a bassa velocita' (I<sup>2</sup>C, SPI, 1-Wire, ...);
- gestione e utilizzo di software CAD elettronico dedicato al disegno di schemi elettrici, alla progettazione PCB, alla simulazione analogica e digitale, allo sviluppo di ASIC.

Principali attivita' pregresse:

- sviluppo del sistema di readout per il rivelatore a silicio dell' esperimento E835;
- partecipazione allo sviluppo di ASIC digitale per il controllo dei pixel detector dell' esperimento ATLAS;
- sviluppo del sistema di trigger per l'esperimento BOREXINO;
- sviluppo di ASIC mixed signal per front-end di PMT multi anodici e relativo apparato di test in laboratorio, nell' ambito dell' esperienza EUSO;
- sviluppo del sistema elettronico per la lettura del rivelatore a fibre scintillanti dell' esperimento MEG;
- sviluppo del sistema di front-end e alimentazione HV per il modulo ottico direzionale nell' ambito delle attivita' NEMO in sezione;
- sviluppo dell' elettronica di readout per la realizzazione di una gamma camera dedicata all' imaging SPECT di piccoli animali e alla scintimammografia.
- Sviluppo dell' elettronica per equipaggiare un rivelatore per immagini biomedicali di tipo PET e SPECT dedicato all' imaging multimodale della prostata con fusione di immagini funzionali (PET/SPECT) e morfologiche (MRI). Si prevede l' utilizzo di matrici di SiPM come sensore di luce. Il sistema misura principalemnte il tempo di arrivo di segnali del rivelatore con precisioni dell' ordine di 200-400 ps.
- Sviluppo di elettronica di front end e read out per l'equipaggiamento di un detector GEM installato presso il Jefferson Laboratory

• Coordinamento allo sviluppo della scheda di controllo del modulo ottico del telescopio sottomarino per neutrini KM3NeT

Attivita' attuali:

- Sviluppo del sistema di front-end per il detector veto dell' esperimento DarkSide-20K
- Supervisione e studio del sistema di grounding e alimentazione per l'esperimento DarkSide-20K
- Responsabile dell' attivita' di un assegnista sulla sigla CLEANDEM (EU project)
- Inizio lavoro su rivelatore criogenico Grain dell'esperimento DUNE
- Partecipazione al progetto PNRR RAISE
- Responsabilita' diretta del Servizio di Elettronica della sezione di Genova dell' INFN e coordinamento del lavoro del personale tecnico afferente.
- Contitolare corso di studi "Elettronica Applicata" laurea magistrale in Fisica Universita' di Genova AA 2022/2023 e 2023/2024
- Contitolare corso di dottorato "Elettronica ed Acquisizione dati"

Interessi professionali:

- studio di sistemi elettronici per l' equipaggiamento di rivelatori innovativi;
- applicazioni delle tecnologie disponibili in ambito INFN (e di ricerca) in campo sociale e, piu' specificamente, biomedicale.

Elenco delle ultime pubblicazioni firmate

- 1. "Molecular Breast Imaging system with dual asymmetric detection heads for early breast cancer diagnosis", 21<sup>th</sup> International Workshop on Radiation Imaging Detectors, July 7-12, 2019 in Kolympari, Chania, Crete, Greece
- "Development of a high-resolution and high efficiency Single Photon detector for studying cardiovascular diseases in mice", ArXiv:1910.08781 [physics.med-ph], Submitted on 19 Oct 2019
- "KM3NeT acquisition: The new version of the Central Logic Board and its related Power Board, with highlights and evolution of the Control Unit", proceedings of the 15<sup>th</sup> Topical Seminar on Innovative Particle and Radiation Detectors (IPRD2019) 14-17 October 2019 Siena, Italy, doi: 10.1088/1748-0221/15/03/C03024
- 4. "Reliability studies for the Switching Core Board of the White Rabbit Switch: FIDES and Highly Accelerated Life Test", oral presentation and proceedings at the 15<sup>th</sup> Topical Seminar on Innovative Particle and Radiation Detectors (IPRD2019) 14-17 October 2019 Siena, Italy, doi: 10.1088/1748-0221/15/02/C02042
- 5. *"The CLAS12 Forward Tagger"*, NIM-A, 2020 Volume 959, doi: 10.1016/j.nima.2020.163475

- 6. "*KM3NeT front-end and readout electronics system: hardware, firmware, and software*", J. Astron. Telesc. Instrum. Syst. 5(4), 046001 (2019), doi: 10.1117/1.JATIS.5.4.046001
- 7. "Single photon detection with the multi-anode CLAS12 RICH detector", NIM-A (2020) Volume 952, doi: 10.1016/j.nima.2019.04.077
- 8. "The large-area hybrid-optics CLAS12 RICH: Assembling, commissioning and first data-taking", NIM-A (2020) Volume 952, doi: 10.1016/j.nima.2019.01.070
- 9. "The CLAS12 Ring Imaging Cherenkov detector", NIM-A (2020) Volume 964, doi: 10.1016/j.nima.2020.163791
- 10. "The Gamma and Neutron Sensor System for Rapid Dose Rate Mapping in the CLEANDEM Project", Sensors 2023, 23(9), 4210, doi: 10.3390/s23094210
- 11. "The Power Board of the KM3NeT Digital Optical Module: Design, Upgrade, and Production", Electronics 2024, 13, 2044. https://doi.org/10.3390/electronics13112044

Genova, 20 Maggio 2025

Ing. Paolo Musico



#### CURRICULUM VITAE Daniela Ascenzi

#### • PERSONAL INFORMATION

Family name, First name: Ascenzi, Daniela

Researcher unique identifier(s): ResearcherID K-8888-2019, ORCID ID 0000-0001-5393-9554, Scopus Author ID 6603776124

URL for web site: <u>https://molecular.physics.unitn.it/</u> and https://webapps.unitn.it/du/it/Persona/PER0003443

#### • EDUCATION

- 1998 PhD in Chemistry, Dept. Chemistry, University of Perugia, Italy <u>PhD Supervisors:</u> prof. Fernando Pirani & prof. Vincenzo Aquilanti
- 1995 "Abilitazione" to the chemical profession, University of Perugia, Italy.
  1993 Master Master's degree (Laurea) in Chemistry (summa cum laude),
- University of Perugia, Italy

#### CURRENT POSITION

from 2014 Associate professor of General and Inorganic Chemistry (CHIM03 03/B1) Department of Physics, University of Trento, Italy

#### • PREVIOUS POSITIONS

 2005 – 2014 Researcher in General and Inorganic Chemistry Department of Physics, University of Trento, Italy
 2000 – 2004 post-doc (group of Prof. Davide Bassi) Department of Physics, University of Trento, Italy
 1998 – 2000 post-doc (group of Prof. Andrew J. Orr-Ewing) School of Chemistry, University of Bristol, UK

#### • FELLOWSHIPS AND AWARDS

- 2022 visiting professor at Paris-Saclay University
- 1998 2000 EU-MSCA Individual Fellowship

School of Chemistry, University of Bristol, UK

#### • FUNDING & RESEARCH PROJECTS

- 2023 PRIN 2022 PNRR "Degradation of space-technology polymers by thermospheric oxygen atoms and ions: an exploration of the reaction mechanisms at an atomistic level" - PI of the Trento unit, Grant ID: P20223H8CK, starting in October 2023 (possibly)
- 2022 PRIN 2020 project "Astrochemistry beyond the second period elements" PI of the Trento unit, Grant ID: 2020AFB3FX, star/ending dates: 22/3/2022-



22/3/2025

- 2019-2023 EU Project H2020-MSCA-ITN-2018 ACO-AstroChemical Origins PI of the Trento unit, Grant ID: 811312, start/ending dates: 01/5/2019-31/10/2023
- From 2009 PI of several successful beamtime proposals at ELETTRA (Italy) and SOLEIL (France) Synchrotron radiation facilities and FELIX (Free Electron Laser facility at Radboud University, NL)
- From 2019 COST Action MD-GAS Molecular Dynamics in the Gas Phase participant
- 2014 2018 COST Action CM1401 Our-astrochemical history participant
- 2012 2017 COST Action CM1204 XUV/X-ray light and fast ions for ultrafast chemistry XLIC participant
- 2010 2013 COST Action CM0805 The Chemical Cosmos: Understanding Chemistry in Astronomical Environments - participant
- 2010 2012 Bilateral research program CNR-AVCR Ion-molecule reactions relevant to Titan's ionosphere - PI of the Trento unit
- 2007-2009 Bilateral research program CNR-AVCR Gas-phase chemistry and physics of new rare-gas compounds - PI of the Trento unit
- 2009-2012 FP7 Europlanet Research Infrastructure member of the associate institute

### • SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2013–2023 Supervisor of 5 PhD students in Physics, Doctoral School in Physics, University of Trento: 24th cycle (J. Aysina), 30th cycle (A. Cernuto), 34th cycle (V. Richardson), 35th cycle (X. He), 38th cycle (M. Michielan) and several MS students in Physics

#### • TEACHING ACTIVITIES (all at the University of Trento)

- From 2018 Environmental Physical Chemistry 6CFU MS in Environmental Meteorology
- Form 2011 General and Inorganic Chemistry 9CFU BS in Biomolecular Science and Technologies
- From 2019 Safety in the laboratory (Italian and English versions)
- 2021-2022 Radiation Chemistry for the PhD School in Physics (co-lecturer)
- 2017-2019 Percorso di approfondimento in Fisica for the BS in Physics
- 2020-2021 Percorso di approfondimento in Fisica for the BS in Physics
- 2008-2019 Laboratory of General Chemistry, 3CFU BS in Physics
- 2012-2013 Laboratory of Energy Conversion Processes, 6CFU MS in Physics
- 2006-2007 Laboratory of Energy Conversion Processes, 6CFU MS in Physics
- 2008-2010 Laboratory of "General and inorganic Chemistry, 3CFU BS in Biomolecular Science and Technologies
- 2006-2007 Laboratory classes in *Physics III*, BS in Physics

#### ORGANISATION OF SCIENTIFIC MEETINGS / LECTURING

- 2024 Chairperson and organizer of XXIV SASP (Symposium on Atomic, Cluster and Surface Physics), to be held in Andalo (TN) from 28<sup>th</sup> January to 2<sup>nd</sup> February 2024 (<u>https://event.unitn.it/sasp2024/</u>)
- 2019 Lecturer First ACO Network School, University of Perugia, IT



- 2016 Lecturer, #bethechange to favour exploration of STEM subjects among high school female students
- 2006 Chairperson and organizer of MOLEC XVI European Conference on Dynamics of Molecular Systems, Levico Terme 11-15 September 2006

#### • INSTITUTIONAL RESPONSIBILITIES

- From 2020 Representative of the Physics Dept. for the Scholars at Risk program, UNITN
- From 2020 Representative of the Physics Dept. for disability, specific learning disability, and special needs, UNITN
- From 2015 Representative of the Physics Dept. for Gender Equality and Diversity, UNITN
- From 2009 Delegate for the stage and placement of students in the BS and MS degrees in Physics, UNITN
- 2014-2017 Member of the Executive Board of the Physics PhD program

Member of the examining board for the following PhD thesis:

- 2022 PhD in Physics, joint between Sorbonne University, FR & University of Trento; PhD in Physics joint between University of Innsbruck and University of Lyon
- 2021 PhD in Chemistry, University of Perugia, IT
- 2019 PhD in Physics, University of Trento, IT
- 2018 PhD in Physics, University of Trento. IT
- 2017 PhD in Chemistry, University of Perugia, IT; PhD in Physics, University of Rennes, FR
- 2010 PhD in Physics, Stockholm University, SE

#### • **REVIEWING ACTIVITIES**

- From 2020 Member of the editorial board for the MDPI Open access journal "Molecules Cross-field Chemistry Section"
- 2019-2023 Member of the Supervisory Board, EU ITN ACO, European Union's Horizon 2020
- From 2018 Member of the Scientific Board of SIA (Italian Society of Astrobiology)
- From 2018 Program Committee Member of the Computational Astrochemistry Workshops of Annual International Conference on Computational Science and Applications (ICCSA)
- From 2017 Member of the International Scientific Committee of SASP (Symposium on Atomic, Cluster and Surface Physics)

Reviewer for funding agencies: ASI (Italian Space Agency), National Science Foundation USA, European Commission, Latvian Council of Science

She regularly acts as reviewer for international journals, among which: Physical Chemistry Chemical Physics, Journal of the American Chemical Society, Journal of Physical Chemistry, Analyst, Frontiers in Chemistry, ACS Earth and Space Chemistry,

#### MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2006 – to date Member of the Italian Chemical Society



#### • MAJOR COLLABORATIONS

Roland Thissen & Christian Alcaraz, *Ion-molecule reactions with synchrotron radiation*, CNRS & Paris Saclay University, FR;

W. Geppert, *Astrochemistry and astrobiology*, Astrobiology Center, Stockholm University, Sweden;

Cecilia Ceccarelli, *Astrochemical Origin*, IPAG (Institut de Planétologie et d'Astrophysique de Grenoble), Grenoble, FR;

Sandra Brünken, *IR spectroscopy of astrochemical ions*, FELIX (Free Electron Laser for Infrared eXperiments) Lab, University of Nijmegen, NL;

Miroslav Polasek & Jan Zabka, *Ion molecule reactions of relevance for Titan atmosphere*, Heyrovsky Institute of Physical Chemistry, Academy of Science of the Czech Republic, CZ; Ryan Fortenberry, Dept. Chemistry and Biochemistry, University of Mississippi, USA;

Nadia Balucani & Fernando Pirani & Marzio Rosi, *Astrochemical Origin, Astrochemistry of Third Raw Elements*, Dipartimento di Chimica, Biologia e Biotecnologie, Università degli studi di Perugia, IT

Piero Ugliengo Astrochemical Origin, Astrochemistry of Third Raw Elements, University of Torino, IT

Paola Bolognesi & Lorenzo Avaldi & Marcello Coreno, *Ion-molecule reactions of biologically relevant ions,* CNR & Elettra Sincrotrone Trieste, IT

#### • **DISSEMINATION & PUBLIC OUTREACH**

- Sept 2023 Participation to the Researchers'night@MUSE, Trento with the selected project "Il viaggio dell'acqua: dagli atomi alla vita"
- May 2022 Award cerimony for the regional prizes of Giochi della Chimica 2022, Liceo Scientifico Galilei, Trento, IT: public speech on "Astrochimica: Molecole nello spazio e l'origine della vita sulla Terra"
- Sept 2021 Researchers'night @ MUSE, Trento, IT "Il giardino della scienza / Tour virtuale dei laboratori" public speech on "Gas ionizzati, plasmi e loro applicazioni: dall'astrochimica alle nuove tecnologie per l'energia e l'ambiente"
- From 2016 coordinator for the Dept. Physics, University of Trento of the SummerLab initiative for primary school children

#### • CAREER BREAKS

2014-2015 8 months maternity leave

# prof. Paolo Zuccon

8715 citations, h-Index: 46 source WOS 7/5/25

## WORK EXPERIENCE

Trento University	Trento, IT
Associate Professor	2021-current
Trento University	Trento, IT
Assistant Professor	2018-2020
Massachusetts Institute of Technology (MIT)	Cambridge, MA, USA
Assistant Professor	2012 - 2017
INFN Sezione di Perugia	Perugia, IT
Research Scientist	2005-2011
<b>INFN Sezione di Perugia</b>	Perugia, IT
Post doc	2003-2005
ELECTED GRANTS AND OTHER ACHIEVEMENTS	

#### Selected grants AND OTHER ACHIEVEMENTS

<b>Progetto PHESCAMI - PRIN 2022</b> Co-PI and Trento University Group Leader	2023
<b>PNNR SpaceItUp - Spoke 6</b> Trento University Unit Group Leader	2023
Abilitazione professore di I fascia SC: 02/A1 SSD: FIS01	since 2023
Abilitazione professore di II fascia SC: 02/A1 SSD: FIS01	since 2014

#### EDUCATION

<b>Perugia University</b>	Perugia, IT
Ph.D. in Particle Physics, Advisor: prof. R. Battiston	2000-2003
Padova University	Padova, IT
Post degree Physics specialization course	1998–1999
Padova University	Padova, IT
M.S. in Physics, Advisor: prof.sa Milla Baldo-Ceolin	1998

#### Responsibilities

Head of the Astro-Particle Physics Laboratory	
Physics Department - Trento University	2018-current
National Responsible for the AMS-02 experiment INFN	2020-2023
Physics Coordinator (deputy-spokesperson), AMBER (NA66) experiment CERN	2021-current
Member of the Collaboration Board of the AMBER (NA66) experiment $CERN$	2021-current
<b>Responsible of the Trento University Spoke6 Unit of the SpaceItUP project</b> Physics Department - Trento University	2024-current
<b>Responsible of the Trento University Unit of the PHESCAMI PRIN project</b> Physics Department - Trento University	2023-current

#### FUNDS MANAGEMENT

- 2012 MIT Starting grant When I joined the MIT Faculty as Assistant Professor in 2012, I received a starting grant of 300 k\$
- 2013-2017 MIT DOE funds In the context of the DOE grant to the whole AMS-02 MIT group I managed 100k\$ per year.
- 2020-2023 AMS-02 National responsible As national responsible for AMS-02, each year I submitted a funding request to INFN for the Italian collaboration and managed about 500 k€ per year.
- 2018-current As head of the Astro-Particle Physics laboratory at the Trento University Department of Physics, I manage yearly a budget of about  $12k \in$
- 2023-2026 PRIN2022 PHESCAMI as responsible of the Trento University unit of this project, I am managing a budget of about 146k€ over 30 months.
- 2024-2027 SpaceItUp Spoke 6 as responsible of the Trento University unit of this project, I am managing a budget of about 570 k€ over 36 months
- 2022-current AMBER local responsible as local responsible for the AMBER experiment. I manage a budget of about 40k€ per year.

#### SKILLS

- **Programming:** FORTRAN, C, C++, et al.
- Computing: UNIX/LINUX SysAdmin
- Data Analysis: ROOT, MatLab, et al.
- Project management: Ryver, GANNT, et al.

#### LANGUAGES

- Italian: mother tongue
- English: fluent
- French: proficient

## RESEARCH ACTIVITY

Coordinator of the Astro-Particle Physics Laboratory at the Physics Department of Trento University. His research interests focus on cosmic ray physics and the development of advanced detectors for space missions.

He has been a member of the AMS-02 collaboration since 2000, and he covered several responsibility roles within the collaboration, both during the experiment construction and after the installation on the International Space Station in May 2011. From 2020 to 2023 he served as AMS-02 national responsible for Italy.

He participates in the CSES/LIMADOU project, where he has been responsible for developing and implementing a spacequalified data acquisition system for the pixel silicon tracker.

He also has a leadership role in the AMBER experiment at CERN where he proposed and led the AMBER measurement of cross sections of interest for the cosmic rays.

He regularly presents his work at international conferences, often as an invited speaker. He published more than 100 papers in the most important physics journals as PRL and ApJ.

A list of Prof. Zuccon's publications can be found at:

https://www.scopus.com/authid/detail.uri?authorId=23007073000

or at:

https://inspirehep.net/literature?sort=mostrecent & size=25 & page=1 & q=find % 20a % 20 zuccon % 2 Cp is the second statement of the second stateme

#### SERVICE TASKS

• Delegato per la qualità Dipartimento di Fisica	since 2020
• PhD selection committee Dipartimento di Fisica	2019
• Member of the Physics PhD, collegio docenti Dipartimento di Fisica	since 2021
• Member of the Physics PhD, comitato esecutivo Dipartimento di Fisica	since 2023
• Member of advising committee for the department self-evaluation Dipartimento di Fisica	<b>u</b> 2024

## TEACHING

Course Professor at Trento University     Laboratorio di Fisca Sperimentale - Ingegneria Industriale	Fall 2020- current
• Course Professor at Trento University Laboratorio di Fisca 1 - Fisica	Spring 2019- current
• Lecturer at Trento University Lecture at Percorso Approfondimento di Fisica - Fisica	Spring 2024
• Lecturer at Trento University Lecture on Radiation Safety for students	Fall 2024
• Lecturer at Trento University Lecture on Radiation Safety for students	Fall 2023
• Course Professor at Trento University Fisica 1 per Ingegneria Industriale	Spring 2018
• Lecturer at Trento University Lecture at Percorso Approfondimento di Fisica - Fisica	Spring 2018
• Course Professor at MIT Junior Lab I/II course for Physics majors (8.13, 8.14)	Spring 2017
• Course Professor at MIT Honor class in Electricity and Magnetism (8.022)	Fall 2016
• Course Professor at MIT Junior Lab I course for Physics majors (8.13)	Spring 2016
• Course Professor at MIT Junior Lab I course for Physics majors (8.13)	Fall 2015
• Course Professor at MIT Junior Lab II course for Physics majors (8.14)	Spring 2015
• Course Professor at MIT Honor class in Electricity and Magnetism (8.022)	Fall 2014
• Course Professor at MIT Junior Lab II course for Physics majors (8.14)	Spring 2014
• Course Professor at MIT Honor class in Electricity and Magnetism (8.022)	Fall 2013
• Recitation Instructor at MIT Honor class in Electricity and Magnetism (8.022)	Fall 2012
• Course Professor at MIT Junior Lab I course for Physics majors (8.13)	Spring 2012

## THESIS ADVISING

• I currently advise 3 Ph.D. students	2022-current
- F. Rossi - 3rd year - Search for anti-Helium in cosmic rays with AMS-02	
– L. Cavazzini - 3rd year - LGAD sensor development (in coll with FBK)	
– D. Scheldeviz - 1st year - SpaceItUp Project spoke6	
• Advisor of a Ph.D. thesis A. Dass, "Be isotopes measurement with AMS-02 to reduce astrophyisca uncertainty in dark matte Trento University, Italy	2020-2024 r models"
• Advisor of Master thesis M.Meyer, "Helium Flux and Antihelium Candidates with AMS-02", Trento University, Italy	2022
• Advisor of a Ph.D. thesis (in coll. with FBK) A.Bisht, "Development of Low Gain Avalanche Detectors for Astroparticle Physics Experiments in Trento University, Italy	2019-2022 Space"
• Advisor of a Ph.D. thesis G.Gebbia, "Design and implementation of a space qualified DAQ system for the HEPD-02 silicon tr Trento University, Italy	2019-2022 acker"
Advisor of Master thesis	2019

C.Cernetti, "Measurement of Beryllium isotopic composition in Cosmic Rays with the AMS-02 experiment on the International Space Station", Trento University, Italy

- Advisor of a Ph.D. thesis
   M.Behlmann, "Measurement of <sup>3</sup>He/<sup>4</sup>He isotopic ratio in cosmic rays with AMS-02", MIT, Cambridge, MA, USA
- Advisor of a Ph.D. thesis A.I.Chen, "Measurement of Cosmic Antiprotons with the Alpha Magnetic Spectrometer aboard the International Space Station", MIT, Cambridge, MA, USA
- co-advisor of a Ph.D. thesis A.Oliva, "High Charge Cosmic Rays Measurement with the AMS-02 Silicon Tracker", Perugia University, Italy
- co-advisor of a Ph.D. thesis 2003-2005 D. Caraffini, "Anti-proton flux detection and indirect search for dark matter with the AMS-02 experiment", Perugia University, Italy

#### Selected Conference Talks

•	SUGAR 2024 Madison, WI, USA,14-17 October 2024 Oral presentation: "AMS-02 results and perspectives for future measurements with a magnetic spectrometer", invited talk
•	TAUP 2023       Vienna, Austria, 28 August-1 September 2023         Oral presentation: "Cosmic Deuteron and He isotopes fluxes measured with AMS"
•	ASAPP 2023 Perugia, Italy, 19-23 June 2023 Oral presentation: "Measurements of cross sections of Astroparticle Physics relevance", invited talk
•	Cosmic Rays in the Multi-Messenger Era 2022Paris, France, 5-7 December 2022Oral presentation: "Results from AMS-02", invited talk
•	Cosmic Rays International Seminars - CRIS 2022Napoli, Italy, 12-16 September 2022Oral presentation: "Review of Cosmic Rays direct measurement from satellites", invited talk
•	<b>COSPAR 2022- 44th Scientific Assembly</b> Athens, Greece, 16-24 July 2022Oral presentation: "Properties of cosmic deuterons and <sup>3</sup> He nuclei"Athens, Greece, 16-24 July 2022
•	ANTINUCLEI IN THE UNIVERSE? MIAPP, Munchen, Germany, 28 February 5 March 2022 Oral presentation: "AMS-02 Results", invited talk
•	MG16: 16th Marcel Grossman Meeting online conference, 15-18 July 2021 Oral presentation: "AMS-02 Results on Cosmic Rays fluxes" invited talk
•	<b>22nd International Workshop on Radiation Imaging Detectors (iWORID21)</b> Gand, Belgium, online conference, 27 Jun - 1 Jul 2021 Oral presentation: "The DAQ system for the HEPD-02 tracker: a clock-on-demand approach for using Monolithic Active Pixel Sensors in space"
•	ICHEP2020: 40th International Conference on High Energy Physics Prague 2020 (online only) Oral presentation: "ALPIDE pixel detector for tracking in space"
•	<b>XSCRC2019:</b> Cross sections for Cosmic Rays @ CERN Geneva, Switzerland, November 2018 Oral presentation: "The COMPASS++/AMBER program for p-bar production cross-sections measurements" invited Talk
•	<b>1st workshop Light Anti-Nuclei as a Probe for New Physics</b> Leiden, The Netherlands, 2019 Oral presentation: "The COMPASS++/AMBER program for cross-sections measurements" invited talk
•	<b>19th Lomonosov Conference on High Energy Particles</b> Moscow, Russia, August 2019 Oral presentation: "Status and perspective of the AMS-02 Experiment" invited talk
•	<b>2nd Cosmic-ray Antideuteron Workshop</b> <i>Oral presentation: "Measuring cross sections for anti-p and anti-d production with COMPASS++/AMBER"</i> Invited talk
•	Cosmic Rays International Seminars - CRIS 2018Portopalo, Italia,June 2018Oral presentation: "Highilghts on AMS-02 Measurements"Invited talkPortopalo, Italia,June 2018
•	<b>EPS Conference on High Energy Physics (HEP2017)</b> Venice, Italy, July 2017 Oral presentation: "Precision Measurement of <sup>3</sup> He-to- <sup>4</sup> He ratio in Cosmic Rays with the AMS Detector on the Space Station"
•	XI International Conference on Interconnections between Particle Physics and Cosmology (PPC2017) Corpus Christi, TX, USA, May 2017

2013 - 2017

2005-2007

Oral presentation: "Searching for new Physics in cosmic rays with AMS-	-02", Invited talk
• Invited colloquium at Texas A&M, Physics department	College Station, TX, USA, April 2017
• XSCRC2017: Cross sections for Cosmic Rays @ CERN Oral presentation: "Measuring anti-p XS with a fixed target magnetic spectrum."	Geneva, Switzerland, March 2017 ectrometer", Invited Talk
• Mitchell Workshop on Collider and Dark Matter Physics "Electron and positrons measurements with AMS-02", Invited talk	College Station, TX, USA, May 2016
• Mitchell Workshop on Collider and Dark Matter Physics Oral presentation: "Cosmic rays measurements with AMS-02", Invited to	College Station, TX, USA, May 2015 alk
• APS Annual meeting 2015 Oral presentation: "Latest results from the AMS experiment on the Inter	Baltimore, MD, USA, April 2015 national Space Station", Invited talk
Invited colloquium at McGill University	Montreal, Canada November 2014
• APS Texas annual meeting, Oral contribution: "Review of Cosmic Rays direct measurement from sp	College Station TX, USA, October 2014, <i>ace</i> ", plenary talk
• Invited colloquium at Notre Dame University,	South Bent, IN, USA, October 2014
• Invited colloquium at Columbia University,	New York, NY, USA September 2014
• APS Annual meeting 2014, Oral presentation: "AMS-02 Searching for new physics in cosmic rays",	Savannah, GA, USA, April 2014 Invited talk
• AAAS annual meeting 2014 – Symposium: Dark Matter Disce Chicago, USA, 2014 Oral presentation: "AMS-02 a cosmic ray detector on the ISS", Invited	overies: Challenges and Innovation, talk
• AAAS annual meeting2014 – Symposium: Innovation and Colla national Space Station Experience Oral presentation: "Searching for New Physics in the Cosmic Rays", Inv	boration at 17,500 MPH: The Inter- Chicago, USA, 2014 ited talk
Invited Colloquium at University of Massachusetts Amherst	Amherst, MA, USA, September 2013
• Lepton Photon 2013 Oral presentation: "First results of the AMS-02 experiment", Invited Tal	USCF, San Francisco USA, July 2013 lk
• CHEP 2010 Oral presentation: "AMS Monitoring Tool: a web 2.0 approach"	Taipei, Taiwan, October 2010.
• <b>31th International Cosmic Ray Conference</b> Oral presentation: "Status and perspectives of AMS on the ISS"	Lodz Polonia, Luglio 2009
• 37th COSPAR Scientific Assembly Oral presentation: "The Alpha Magnetic Spectrometer on the Internation	Montreal, Canada, July 2008 nal Space Station"
8th International Conference on Large Scale Applications and R     Detectors     Oral presentation: "Construction and performance of the AMS-02 Silicon	adiation Hardness of Semiconductor Firenze, Italy, June 27-29, 2007 n Tracker"
• 36th COSPAR Scientific Assembly Oral presentation: "AMS-02 a particle detector in the space"	Beijing, China, $16 - 23$ July 2006
• 29th International Cosmic Rays Conference	Pune, India, August 2005

Oral presentation: "Performance of the AMS-02 silicon tracker"

ne, India, Augus