

Pietro Antonioli



Posizione

Dirigente di Ricerca presso l'Istituto Nazionale di Fisica Nucleare, sezione di Bologna

- 2022 Vincitore di concorso a dirigente di ricerca
- 2014 Abilitato per funzioni di professore di I fascia nel S.C. 02/A1 al concorso per Abilitazione Scientifica Nazionale
- 2008 Vincitore di concorso a primo ricercatore
- 1994 Vincitore di concorso a ricercatore presso la sezione INFN di Bologna

Principali attività sperimentali e responsabilità

2018- ... Electron-Ion Collider (BNL: sigla EIC_NET, esperimento ePIC)

- Attività di R&D su SIPM per rivelatore dRICH con studio danno da radiazione e tecniche di annealing. Coordino DAQ per rivelatore dRICH. Come responsabile nazionale ho promosso scuola di fisica su EIC (giugno 2023), coordino attività di 12 gruppi italiani e la gestione di fondi esterni ricevuti dal DoE.

- 2021-.. Responsabile nazionale EIC_NET
- 2023 - .. deputy chair membership committee esperimento ePIC

2000 - ...Esperimento ALICE (CERN)

- 2020-.. membro Editorial Board
- 2019-.. Deputy Project Leader TOF
- 2017-2019 Chair del Conference Committee e membro del Management Board
- Dal 2013: responsabile locale esperimento
- Dal 2013: membro del Technical Board e del Collaboration Board
- 2010-2014 coordinatore delle tecniche di Particle Identification
- Dal 2003 responsabile sistema di read-out detector TOF
- Dal 2000 responsabile TDC detector TOF

Durante la fase di sviluppo e costruzione: realizzazione test su radiazione di elettronica digitale presso acceleratori di Legnaro, PSI Zurigo e Louvain-la-Neuve. Sviluppo prototipi elettronica, gestione gare di appalto, analisi dati test su fascio, commissioning detector. Interazione con realtà industriali nell'ambito dell'elettronica digitale in Italia e in particolare in Emilia-Romagna

Analisi di fisica su barioni charmati, su differenze di massa nuclei leggeri e formazione nuclei leggeri in collisioni pp. Coordinamento analisi a Bologna per il gruppo (a partire dal 2013)

1996-2000 Fisica del neutrino

- Co-autore della proposta Monolith (simulazioni Monte Carlo)
- Co-autore della proposta Aqua-Rich (simulazioni Monte Carlo, realizzazione test su fascio di prototipi)

1991-1997 Esperimento EAS-TOP (Gran Sasso)

- Costruzione e commissioning calorimetro e rivelatore di muoni MHD dell'apparato EAS-TOP. Sviluppo sistema di calibrazione del calorimetro adronico.
- Analisi eventi multi-core (argomento anche della tesi di dottorato), eventi correlati con LVD, ricerca di gamma burst.

1989- ... Esperimento LVD (Gran Sasso)

- Dal 1996 responsabile DAQ (gestione upgrade nel 2000)
- Dal 1997 co-rappresentante per la Coll. LVD nel working-group SNEWS (network internazionale di esperimenti neutrinici per rivelazione collapsi stellari)
- Sviluppo software di analisi e codice Monte Carlo. Analisi su fenomeni transienti (collapsi stellari, gamma burst) e su fisica dei muoni cosmici (misure di intensità, componenti muoni prompt, eventi correlati con EAS-TOP)

Altre attività scientifiche

- 2006-2009 Coordinatore Gruppo III presso la Sezione di Bologna e membro della Commissione Scientifica Nazionale INFN per la Fisica Nucleare
- 2015-2019 Rappresentante INFN nel Comitato di Indirizzo Scientifico d ASTER, Consorzio promosso dalla Regione Emilia Romagna per l'Innovazione e il Trasferimento Tecnologico
- Organizzazione conferenze nazionali e internazionali (XXIV International Symposium on Multiparticle Dynamics, Bologna, 2014 "The physics of heavy ions at LHC", Bologna, 2015, "Sixth International Conference on Large Hadron Physics, Bologna, 2018
- 2019-2022, membro dell'International Advisory Committee conferenze LHCP

Attività didattica presso l'Università di Bologna

Seminari specialistici o moduli di lezioni (docente a contratto a titolo gratuito) svolti nell'ambito dei corsi di Fisica Superiore, Metodologie Sperimentali in Fisica e Astrofisica delle particelle e Laboratorio di Acquisizione Dati e Data Processing:

- Tecniche Monte Carlo
- Introduzione ai sistemi di acquisizione dati
- Deep Inelastic Scattering
- Urto di ioni pesanti relativistici: lo studio del Quark Gluon Plasma
- Correlazioni di Bose-Einstein e effetto HBT: femtoscopia nella fisica delle particelle elementari

2020-2023: membro del Collegio di Dottorato

Co-relatore di tesi di laurea

Supervisore tesi di dottorato

Istruzione e formazione

- 1994 Borsa post-doc INFN
- 1994 Dottorato di ricerca in Fisica presso Università degli Studi di Torino
- 1990 Laurea in Fisica presso Università degli studi di Torino (110 e lode e menzione d'onore)
- 1985 Maturità classica presso il Liceo D'Azeglio di Torino (59/60)

Lingue

- Inglese C1
- Francese (comprensione B1, interazione A2, scritto A1)

Premi

- Vincitore nel 1992 del premio per la Fisica riservato ai laureati in Fisica dopo il maggio 1989 bandito dalla Società Italiana di Fisica

Interessi

- Diritti umani e aiuto allo sviluppo. Incarichi di governance nelle seguenti organizzazioni:
 1. 2007-2013 Amnesty International (membro del board internazionale e membro del Finance and Audit Committee, 2011-2013 presidente)
 2. 2008- .. Action Aid Italia (membro assemblea dei soci e 2016-2021 presidente)

Short curriculum of Marcella Capua

Associate professor at the Physics Department of UNICAL.

Current Responsibility: Member of 'Riesame' Commission of the Department of Physics of UNICAL. Delegate of the Director of the Physics Department for Pari Opportunità. Head of the research laboratory for the study of Ionizing Radiation, Physics Department of UNICAL.

Research associate of the Istituto Nazionale di Fisica Nucleare (INFN). Member ATLAS and ePIC Collaborations. INFN local head for Terza Missione and local representative of EIC_NET (since 12/2023) and RadioLab projects.

Scientific activity: focused on the field of high energy physics, data analysis and related applied physics. Member of the ZEUS (until spring 2020), ATLAS and ePIC Collaborations.

1. ZEUS and ATLAS

She was local representative for the INFN-Cosenza group of the ZEUS experiment at the DESY laboratory in Hamburg, from 2003 to 2012, and contact person of the local group for the Collaboration until 2020. Her interest is focused on diffractive physics and top physics.

For the ZEUS experiment in Hamburg and ATLAS experiment at CERN, Geneva, she has contributed to the data taking, maintenance of components and she contributes to numerous data analyses.

Since 2010, member of the organizing committee of the International Workshop DIFFRACTION and editor of the proceedings of the workshop; member of the organizing committee of the International Workshop Diffraction from the edition 2010 and member of the International Advisory Committee of Diffraction and Low-x 2018. Now she is working on the organization of the edition of Diffraction and Low-x 2024.

She has participated in the letter of intent for the detector AFP of ATLAS dedicated to the forward physics program: "An R&D proposal to investigate the feasibility of installing proton tagging detectors in the 420-m region at LHC", CERN-LHCC-2005-025 (arXiv:1101.1561).

She has organized, with the support of the Department of Physics and INFN, two international meetings of the AFP collaboration in Rende and Reggio Calabria.

She has also contributed to test beam dedicated to the AFP 3D sensors for the ATLAS upgrade.

2. ePIC and EIC program

She is local representative for the INFN-Cosenza group of EIC_Net. Her scientific activity is focuses on studies for the EIC-ePIC (Diffractive Physics) project and collaborates on studies dedicated to SiPM sensors.

Characterization of SiPM sensors is ongoing in the UNICAL ionizing radiation laboratory. This activity is partially supported by Project Engineering and Design (PED) funds.

She has contributed to the organization of the first international physics school dedicated to the physics program of the EIC project (1st European School on the Physics of the Electron-Ion Collider, 18-22 June 2023, Italy). Collaborated on the proposal for the ATHENA experiment (ATHENA detector proposal - a totally hermetic electron Nucleus apparatus proposed for IP6 at the Electron-Ion Collider ATHENA Collaboration, e-Print: 2210.09048 [physics.ins-det], DOI: 10.1088/1748-0221/17/10/P10019, published in: JINST 17 (2022) 10, P10019) then merged into the ePIC experiment.

3. Applied physics

In the field of Applied Physics, she is responsible for research of the "Ionizing Radiation Laboratory" of the Physics Department of UNICAL. The activity focuses on techniques for measuring the concentration of radon gas in the air, in water and exhalation of building materials. For measurements dedicated to the calculation of the exhalation rate of building materials, she built a 125 L radon chamber, which was also used, for the first time, for measurements of the concentration in spring water samples. At the request of experts in radiation protection, Monte

Carlo simulations of a hemodynamic operating room for the assessment of exposure of medical staff, are in progress. She collaborates with Professor Jheny Orbe, of the University ESPOCH of Riobamba in Ecuador for the transfer of knowledge of applied physics.

She contributed to various conference and workshop, see for example:

- ENVIRA 2019, Prague, 8-13 September 2019.

- ICRER 2019, Vienna 20-21 June 2019.

- Member of the scientific committee of the 2nd International Congress on physics (ICPE 2017), ESPOCH, Riobamba, 6-8/12/2017 and Member of committee for the selection of Hult Prize candidate projects at ESPOCH, Riobamba, 8 December 2017.

- Plenary talk, ICPE 2017, Riobamba, 6-8 December 2017.

Teaching

She participates in the teaching activities of the Physics Department and has supervised numerous internships, master's, and doctoral theses in the three fields summarized above. Currently she teaches "Introduction on health physics" and " Nuclear and particle physics laboratory II".

Outreach and other activities

Her outreach activities mainly involve about 15 schools and over 300 students from Calabria, Basilicata and Ecuador. All the activities carried out are subject to satisfaction questionnaires and are subject to gender compliance in planning and actions. Many activities were presented at national and international conferences.

Outreach activities have led to several national and international publications, the most recent is *RadioLab project: do you know the radon gas?* Accepted and being published in Scientific Reports.

1) She is member of the organizing committee of three series of event: "International Masterclasses-Hands on particle physics", "International Masterclasses girls-Hands on particle physics", "International Masterclasses-Hands on particle therapy" and currently of the organization of the edition 2024 of these events.

2) Since 2017, local responsible of the INFN National Project RADIOLAB (Radioactivity Laboratory) for scientific dissemination in the field of environmental radioactivity, devoted to High School students of many Italian regions and Ecuador. Students are directly involved in measurements of radon gas concentration in air and water and in interviews on the perception of radon risk in the population. She was member of the organization committee of the 2018 RadioLab Summer School, Magiugnaga, Monte Rosa, Italy.

3) Since 2022, she has designed and implemented the first physics school on radon gas measurement techniques in water for high school students of the national Radiolab project.

Publications

Author of numerous publications as a single author and in collaboration (1486 publications). In the last three-year period 2021-2023 she was co-author of about 244 HEP publications in international and national journals (source INSPIRE HEP 3/12/2023), current H-index 200 and 38 in the last three years.

Salvatore Fazio

Curriculum Vitae

EDUCATION

Ph.D. in Physics

2004-2007

Università della Calabria

Thesis title: “Measurement of Deeply Virtual Compton Scattering cross sections at HERA and a new model for the DVCS amplitude”

M.Sc. in Physics

1997-2004

Università della Calabria

Thesis title: “Misura delle sezioni d’urto $\frac{d\sigma}{dQ^2}$, $\frac{d\sigma}{dW}$ e $\frac{d\sigma}{dt}$ in processi diffrattivi di Deeply Virtual Compton Scattering”

WORK EXPERIENCE

Associate Professor

February 2021 - present

Università della Calabria - Dipartimento di Fisica - Rende, Cosenza - Italy

Associate Scientist

January 2019 - February 2021

Brookhaven National Laboratory - Physics Department - Upton, New York - USA

Assistant Scientist

July 2015 - December 2018

Brookhaven National Laboratory - Physics Department - Upton, New York - USA

Research Associate (post-doc)

July 2010 - July 2015

Brookhaven National Laboratory - Physics Department - Upton, New York - USA

Research Fellow (post-doc)

March 2008 - June 2010

University of Calabria - Physics Department - Rende, Cosenza - Italy

Research Fellow (visiting scientist)

April 04, 2008 - August 31, 2008

Joint Institute for Nuclear Research - Dubna, Moscow Region - Russia

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SCIENTIFIC ACCOMPLISHMENTS & LEADERSHIP

Research achievements include:

- The world’s first measurement of the transverse single spin asymmetry of the W^\pm/Z^0 bosons, obtained at the STAR experiment [Phys. Rev. Lett. 116 (2016), 132301].

- A precise measurement of the W^+/W^- cross section charge ratio at the STAR experiment [PoS (DIS2015) 194].
- First comprehensive study of the potential impact of an Electron-Ion Collider on extracting the quarks and the gluon nuclear Parton Distribution Functions (nPDFs) by precise cross sections measurements of both inclusive DIS and charm production events [arXiv:1708.05654, accepted for publication on PRD].
- First and only extensive study of the potential of an Electron-Ion Collider in accessing the Generalized Parton Distributions through measuring Deeply Virtual Compton Scattering [JHEP09 (2013) 093].
- The world’s first measurement of the differential cross section for Deeply Virtual Compton Scattering as a function of the proton momentum transfer by a direct measurement of the final proton momentum, obtained at the ZEUS experiment [JHEP 5 (2009) 108].
- Awards for the best talk and for the best poster at the Young Researchers Symposium 2012, Upton, New York, USA.

Responsibility roles include:

- Since 2022, Analysis Coordinator, ePIC Collaboration at the EIC
- Since 2022, member of the Executive Board, ePIC Collaboration at the EIC
- Year 2021, Convener of the Exclusive & Tagging Physics Working Group, ATHENA proto-Collaboration at the EIC
- Year 2021, ATHENA proto-Collaboration at the Electron-Ion collider: Institutional representative for the University of Calabria
- 2021 - 2023, INFN’s EIC_net Institutional representative for the University of Calabria
- Sep. 2020 - March 2021, Chair of the Nuclear Physics Seminar Committee, BNL
- Member of the BNL EIC strategic planning panel, year 2020
- Coordinator for the EIC-based Letter of Interest on hadron phenomenology, “Snow-mass 2020” initiative.
- Convener of the Exclusive Reactions Physics Working Group, EIC Users’ Group “Yellow Report” initiative - December 2019 - January 2021
- Since 2017, member of the BNL Electron-Ion Collider Project Planning Group
- In 2016, member of the STAR Beam-Use-Request (BUR) Writing Committee
- Run Period Coordinator of the STAR data taking, years 2013-2015 and 2017
- Shift Leader at STAR for the 2012, 2016, 2020, 2021 data taking
- Coordinator of the analysis & software group for the beam tests of silicon 3D pixel detectors at the CERN test beam facility in 2009, to characterize the silicon 3D pixel sensors for the ATLAS experiment silicon tracker upgrade, years 2009-10
- Coordinator of the Data Quality Monitoring at the ZEUS experiment for the period November 2005 to July 2007

AWARDS

- The “Secretary of Energy Achievement Award” - Department of Energy, United States. Presented to Salvatore Fazio, staff of the Solenoidal Tracker Group at RHIC, August 2018.
- The “Tiglio d’Oro” award - XV edition, presented to Dr. Salvatore Fazio by the Calabrian Regional Government (Italy). Aug 06, 2017
- BNL Young Researchers Symposium 2012 - November 30, 2012 - Upton NY
Link: <http://www.bnl.gov/newsroom/news.php?a=23526>
 - **Best oral presentation**
 - **Best poster**
- The “Bergamotto d’Argento” award - VIII edition, presented to Dr. Salvatore Fazio by the KIWANIS International Club of Reggio Calabria (Italy). July 12, 2013

RESEARCH INTERESTS

EIC project (*period: 2010 - present*)

Scientific and technical realisation of the Electron-Ion Collider (EIC) at BNL.

- Study the potential of an EIC in measuring the exclusive processes in e+p collisions with a particular focus on the access of GPDs from measuring DVCS and Vector Mesons.
- Evaluate the potential of an EIC in extracting Nuclear Parton Distribution Functions by measuring cross sections of both inclusive DIS and charm production events.
- Participation in R&D projects for innovative detectors to be used at a future EIC.

STAR experiment (*period: 2010 - present*)

The STAR experiment at the Relativistic Heavy-Ion Collider (RHIC), BNL.

- Run Period Coordinator of the STAR experiment, years 2013-2015 and 2017
- Spin Physics. Study of the Sivers function via measurements of the single spin asymmetry, A_N , for Drell-Yan and weak boson production processes in transversely polarized proton+proton collisions.
- Hadron Structure. Constraining the sea quark flavor ratio (\bar{d}/\bar{u}) through precise measurements of the W^+/W^- cross section charge ratio in unpolarized proton+proton collisions.

ATLAS experiment (*period: 2008 - 2010*)

The ATLAS experiment at the Large Hadron Collider (LHC), CERN.

- The ATLAS Forward Physics upgrade project. Simulation of the roman pots spectrometer stations using GEANT4.
- Characterization of the silicon 3D pixel sensors at the CERN test beam facility, for the ATLAS upgrade.

ZEUS experiment (*period: 2002 - 2010*)

ZEUS was one of the main experiments at DESY Lab, Hamburg (Germany), where the HERA accelerator was operational.

- Diffractive Physics. Constraining Generalized Parton Distribution functions via measurements of the differential cross section, $d\sigma/dt$, for Deeply Virtual Compton Scattering.
- Data Quality Monitoring Coordinator for the diffractive physics working group. Period Nov. 2005-July 2007.

Phenomenology of exclusive processes (*period: 2006 - 2013*)

Phenomenological models that provide a general parametrization of the cross sections in the diffractive exclusive production of vector particles in electron+proton collisions. Results published on: Physics Letters B 645 (Feb. 2007) 161-166; Physical Review D 85, 054009 (2012); Acta Phys. Pol. B 44 (2013) 6.

THERMALIZATION project (*period: April - August 2008*)

The project Thermalization used a proton beam accelerated by the synchrotron U70 at Protvino Lab (Russia) to collide on a liquid hydrogen target.

- Alignment via software of the spectrometer used in the SVP2 detector.
- Important contribution to a joint research proposal between JINR (Dubna, Russia) and the University of Calabria (Italy).

ORGANIZATION OF CONFERENCES AND WORKSHOPS

- **Local Organizer** for the 1st European School on the Physics of the Electron-Ion Collider, 18-22 June 2023, Italy.
- **Local Organizer** for the Diffraction and Low- x International Workshop (DIFFRACTION & Low- x 2022), 24-30 September 2022. Corigliano Calabro, Italy.
- **Member of the International Program Committee** for the 5th Workshop on the QCD Structure of the Nucleon (QCD-N2021), 4-8 October 2021. Alcalá de Henares, Spain.
- **Convener** of the QCD, Spin Physics and Chiral Dynamics session at the 22nd Particles and Nuclei International Conference (PANIC2021), August 30 to September 3, 2021, Lisbon, Portugal.
- **Convener** of the Future Facilities session at the 28th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS2021), Brooklyn NY, April 12-16, 2021.
- **Convener** of the SPIN & EIC Workshop at the RHIC/AGS Annual Users' Meeting, Brookhaven National Laboratory, Upton NY, June 4-7, 2019.
- **Proponent and organizer** of the Workshop on Prospects for extraction of GPDs from global fits of current and future data, National Center for Nuclear Research, Warsaw, Poland, January 22-25, 2019. Link: <https://events.ncbj.gov.pl/event/8/>

- **Proponent and organizer** of the Workshop on Next Generation GPD studies with exclusive meson production at EIC, Center for Frontiers in Nuclear Science at the Stony Brook University of New York. June 4-6, 2018. Link: <https://indico.bnl.gov/event/4346/>
- **Convener** at the EIC Users' Meeting, Argonne National Lab - Lemont IL (USA), July 07-09, 2016. Link: <http://eic2016.phy.anl.gov/>
- **Convener of the Spin Physics Session** (Working Group 6) at the XXIV International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS2016), April 11-15 2016, Hamburg, Germany. Link: <https://dis2016.desy.de>
- **Local Organizing Committee** of the STAR Collaboration Meeting, November 3-7 2013, Brookhaven National Laboratory, Upton NY. Link: <https://drupal.star.bnl.gov/STAR/meetings/star-collaboration-meeting-november-3-7>
- **Organizer and member of the Oral Session Committee** of the BNL Young Research Symposium 2013 - November 15, 2013, Brookhaven National Laboratory, Upton NY, USA. Link: <http://www.bnl.gov/bnlyrs2013/index.php>
- **Local organizer** of the *ATLAS Forward Physics - International Meeting*, 16-17 April 2010. University of Calabria, Rende (Cosenza) Italy. Link: http://web.cs.infn.it/eventi/AFP_meeting_CS/index.html

RECENT TALKS AT CONFERENCES AND SEMINARS (LAST 5 YEARS)

Invited and Plenary Talks

- Invited talk at the 2nd workshop on advancing the understanding of non-perturbative QCD using energy flow, Stony Brook University, USA, November 6-9, 2023 - Title: *The ePIC experiment and physics highlights*
- Invited talk at the 16th International Conference on Meson-Nucleon Physics and the Structure of the Nucleon (MENU 2023) Mainz, Germany, October 16-20, 2023 - Title: *Multidimensional partonic imaging at the future Electron-Ion Collider*
- Invited talk at the XXIX Cracow EPIPHANY Conference, Cracow, Poland, January 16-19, 2023 - Title: *Extracting General Parton Distributions from exclusive measurements at the future EIC.*
- Invited talk at the PARTONS Workshop, Orsay, France, October 26-28, 2022 - Title *DVCS studies @ EIC: White Paper, Yellow Report, ATHENA, ...ePIC.*
- Invited Plenary Talk at Strong and Electro-Weak Matter 2022 (SEWM 2022), Paris, France, June 20-24, 2022 - Title: *Nuclear physics at the Electron-Ion Collider: an experimental perspective.*
- Lectures at the XXXIII INTERNATIONAL SCHOOL of NUCLEAR and SUBNUCLEAR PHYSICS "Francesco Romano", Otranto, Italy, June 3-10, 2022 - Title: *Physics at the future Electron-Ion Collider.*

- Invited Plenary Talk at the 24th International Spin Symposium (SPIN 2021), Matsue, Japan, October 18-22, 2021 - Title: *Experimental studies on the high-energy spin physics in collider experiments at RHIC*.
- Invited Talk at the 5th Workshop on the QCD Structure of the Nucleon (QCD-N2021), 4-8 October 2021. Alcalá de Henares, Spain - Title: *Recent results on the physics of the proton's spin at the STAR experiment*.
- Invited Seminar at the Center for Nuclear Femtography, JLab, October 02, 2020 - Title: *Partonic Spatial Imaging at the EIC*.
- Invited Seminar at YALE University, Department of Physics, Wright Laboratory, New Haven CT, December 19, 2019 - Title of the Seminar: *Physics at the future Electron-Ion Collider*.
- Invited Talk at the workshop on QCD Spin Physics: A Symposium to Honor Jacques Soffer, BNL, October 3-4, 2019 - Title: *Measurements of weak boson production with the STAR detector*.
- Invited Talk at the Joint CFNS & RBRC Workshop on Physics and Detector Requirements at Zero-Degree of Colliders, Stony Brook University, Stony Brook NY, September 24-26, 2019 - Title: *GPD studies with exclusive processes at EIC*.
- Invited Talk at the International Nuclear Physics Conference (INPC 2019), Glasgow, UK, July 29 - August 1, 2019 - Title: *Probing partonic phenomena at the future U.S.-based electron-ion collider*.
- Invited Seminar at the Physics Department of the Pavia University (Italy), July 17, 2019 - Title: *Weak boson production at RHIC*.
- Invited Talk at EDS Blois 2019: The 18th Conference on Elastic and diffractive Scattering, Quy Nhon, Vietnam - June 23-29, 2019 - Title: *Status and Prospects of a Future Electron-Ion Collider*.
- Invited Talk at the 8th Workshop of the APS Topical Group on Hadronic Physics 2019, Denver CO, April 10-12, 2019 - Title: *GPDs Studies at the EIC*.
- Invited Talk at the Workshop on the spectroscopy program at EIC and future accelerators, European Center for Theoretical Studies in Nuclear Physics and Related Areas (ECT*), Trento, Italy, December 19-21, 2018 - Title: *Exclusive Diffraction and GPDs at an EIC*.
- Three Invited Talks at the Institute of Nuclear Theory Program on Probing Nucleons and Nuclei in High Energy Collisions (INT-18-3), Seattle WA, October 1 - November 16, 2018.
 - Title of the 1st talk: *DVCS and GPD extraction with EIC*.
 - Title of the 2nd talk: *Nuclear PDFs and GPDs with EIC*.
 - Title of the 3rd talk: *From proton to nuclear GPDs and PDFs at EIC (and RHIC)*.
- Invited Talk at the 23rd International Spin Symposium (SPIN 2018), Ferrara (Italy), September 10-14, 2018 - Title: *Multidimensional imaging of the partonic structure of hadrons with an Electron-Ion Collider*.

- Invited Talk at the EIC Tracking workshop, University of Virginia, Charlottesville VA, July 24, 2018 - Title: *Physics requirements for an EIC detector*.
- Invited Seminar at the Stony Brook University of NY, Department of Physics and Astronomy, January 22, 2018 - Title: *An uncharted territory - imaging the building blocks of the visible matter in multi-dimensions*.

Selection of Recent Contributed Talks

- Talk at the Department of Nuclear Physics Fall Meeting (DNP2020), New Orleans FL, October 29 - November 1, 2020 - Title: *Cross section measurements of kinematically reconstructed weak bosons in unpolarized p+p collisions at STAR*.
- Talk at the EIC Users Group Meeting 2020, Miami FL (held online), July 2020 - Title: *Progress Report on exclusive processes PWG*'.
- Talk at the Yellow Report Meeting, Temple University (held online), March 19-21, 2020 - Title: *Summary of available DVCS and GPDs impact studies in e+p at EIC*
- Talk at the EIC Users' Group Meeting 2019, Paris (France), July 22-26, 2019 - Title: *Studies of partonic spatial imaging at an Electron-Ion Collider - current status and future plans*.
- Talk (given by J. H. Lee on behalf of S. Fazio) at the Workshop on Initial Stages 2019, New York NY, June 24-28, 2019 - Title: *Partonic Spatial Imaging at an Electron-Ion Collider*.

PUBLICATIONS

To the present date, my scientific production comprises a total of **520** papers:

- **35** individual papers
- **150** publications with the STAR Collaboration
- **86** publications with the ZEUS Collaboration
- **223** publications with the ATLAS Collaboration
- **26** publications on Conference Proceedings

H-index = 78 (WoS); 107 (Google Scholar); 121 (inSPIRE).

A list of my publications will be constantly updated on my inSPIRE profile page is:
<http://inspirehep.net/author/profile/S.Fazio.1>

ORCID ID: <https://orcid.org/0000-0002-4321-1946>

My Google Scholar page is:

<http://scholar.google.com/citations?user=U6pyKe4AAAAJ&hl=en>

Web of Science Researcher ID: G-5156-2010