

Silvia Pisano

Curriculum Vitæ et Studiorum

Nationality: Italian

Residency: Italy

Education

- January 24th, 2007 **Ph.D. in Physics** – “Sapienza” University of Rome (Rome, Italy)
Thesis topic: “*Electromagnetic form factors of the nucleon in spacelike and timelike regions*”; supervisors P [REDACTED]
[REDACTED]
- July 17th, 2003 **Physics Degree (M.S.)** – “Sapienza” University of Rome (Rome, Italy)
Thesis topic: “*Study of the charmless semileptonic B decays with the BaBar experiment*”; supervisors [REDACTED] [REDACTED] [REDACTED] **final score: 110/110 cum Laude.**
- July 1998 **Diploma di Maturità Classica** – Liceo Ginnasio Statale (Classic Lyceum) “Dante Alighieri” (Rome, Italy); **final score: 60/60.**

Employment History

- 31/12/2018 - present **Researcher** (Ricercatore a Tempo Indeterminato III Livello Professionale), Museo Storico della Fisica e Centro Studi e Ricerche Enrico Fermi (Rome), Italy and INFN associate at Laboratori Nazionali di Frascati.
- 05/2018 - 12/2018 **Post-doctoral Research Associate** (Borsa di studio *senior*), Museo Storico della Fisica e Centro Studi e Ricerche Enrico Fermi (Rome), Italy and INFN associate
- 4/2017 - 3/2018 **Post-doctoral Research Associate** (Assegnista di Ricerca), Museo Storico della Fisica e Centro Studi e Ricerche Enrico Fermi (Rome), Italy and INFN associate
- 12/2014 - 12/2016 **Post-doctoral Research Associate** (Assegnista di Ricerca), INFN, Laboratori Nazionali di Frascati, Frascati (Rome), Italy
- 9/2012 - 9/2014 **Post-doctoral Research Associate** (Assegnista di Ricerca), INFN, Laboratori Nazionali di Frascati, Frascati (Rome), Italy
- 2/2011 - 3/2012 **Post-doctoral Research Associate** (Assegnista di Ricerca), University of Rome "Tor Vergata" (Rome), Italy
- 10/2008 - 12/2010 **Post-doctoral Research Associate**, Institut de Physique Nucléaire - CNRS, Orsay (Paris), France
- 8/2008 - 9/2008 **Post-doctoral Research Associate**, Instituto Tecnológico de Aeronautica - ITA-CTA, Sao José dos Campos, SP, Brazil (Fellowship "Angelo Dalla Riccia")
- 1/2008 - 7/2008 **Post-doctoral Research Associate**, Karl Franzens University, Graz, Austria (Fellowship from University of Rome "La Sapienza")
- 6/2007 - 11/2007 **Post-doctoral Research Associate (Co.Co.Co)**, "Sapienza" University of Rome; Rome, Italy

Research Grants and Awards

- 2011 **Winner of the Best Poster competition** at the "9th European Research Conference on Electromagnetic Interactions with Nucleons and Nuclei"
- 2007, November **"Angelo Della Riccia" Fellowship** (Fondazione Angelo Della Riccia), awarded to support research projects in the field of Microphysics presented by young scientists (spent in Instituto Tecnológico de Aeronautica - ITA-CTA, Sao José dos Campos, SP, Brazil).
- 2007, January **Fellowship for research activity** (Rome University "La Sapienza") to support 6 months of research work at foreign insitutions (spent in Karl Franzens University, Graz, Austria).

Scientific responsibilities

- 12/2019 - today **Coordinator of the INFN Scientific Committee 3 (Nuclear Physics) at Laboratori Nazionali di Frascati.**
- 05/20 - today **Referee** for the INFN experiment ULYSSES.
- 12/20 - today **Referee** for the INFN experiment LUNA.
- 2016 **Co-convener** of the session *QCD: partonic phenomena* at INPC2016, the *26th International Nuclear Physics Conference*.
- 2016 **Co-convener** of the session *Spin Physics* at DIS2016, the *24th International Workshop on Deep-Inelastic Scattering and Related Subjects*.
- 6/2015 **Co-spokeperson** of the proposal *Deeply virtual Compton scattering on the neutron with a longitudinally polarized deuteron target* (PR12-06-109a), approved by the *Program Advisory Committee*, to measure DVCS Target-Spin Asymmetry on a longitudinally-polarized ND_3 target in Hall-B at Jefferson Lab.
- 10/2015 - 10/2016 **Coordinator of the rate studies** for the *Calibration and Commissioning* group toward the operations of CLAS12 in Hall-B at Jefferson Lab.
- 10/2014 - 9/2016 **Coordinator of the RICH simulations** in Geant4 to setup and optimize the realization and the operations of the RICH subdetector for CLAS12.
- 6/2014 **Spokeperson (principal investigator)** of the proposal *Higher-twist Collinear Structure of the nucleon on unpolarized hydrogen and deuterium* (E12-06-112A/E12-09-008B), approved by the *Program Advisory Committee*, to measure Di-Hadron Beam-Spin Asymmetry and Fragmentation Functions in Hall-B at Jefferson Lab.
- 6/2010 **Co-spokeperson** of the proposal *Deeply-Virtual Compton Scattering on the neutron with CLAS12 at 11 GeV* (PR12-11-003), approved by the *Program Advisory Committee*, to measure DVCS Beam-Spin Asymmetry on a neutron target in Hall-B at Jefferson Lab.
- 2/2009 **Expert on-call** for the longitudinally-polarized $^{14}NH_3$ target during the CLAS 2009 data taking for the eg1-dvcs experiment.

Responsibilities in conference and workshop organization

- 2/2018 **Member of the Local Organizing Committee** for the *Alice Physics Week* at Laboratori Nazionali di Frascati (Italy).
- 11/2016 **Member of the Local Organizing Committee** for *3D parton distributions: path to the LHC* (3DPDF) at Laboratori Nazionali di Frascati (Italy).
- 11/2016 **Member of the Local Organizing Committee** for *Terzo Incontro Nazionale di Fisica Nucleare* (INFN2016) at Laboratori Nazionali di Frascati (Italy).
- 11/2014 **Member of the Local Organizing Committee** for *The 4th International Workshop on Nucleon Structure at Large Bjorken x* (HiX2014) at Laboratori Nazionali di Frascati (Italy).
- 11/2013 **Member of the Local Organizing Committee** for the *Second Workshop on Probing Strangeness in Hard Processes* (PSHP2013) at Laboratori Nazionali di Frascati (Italy).

Responsabilités in journals

10/2020 **Member** of the Editorial Board of *Particles* (MDPI).

Responsabilités in review activity

Referee for the *European Physical Journal A: Hadrons and Nuclei*.

Chairman of the CLAS analysis review committee for the measurement "Deeply Virtual Production of the ρ^+ Meson on the Proton" - still under review.

Member of the CLAS analysis review committee for the measurement "Single and Double Spin Asymmetries for Deeply Virtual Exclusive π^0 production on Longitudinally Polarized proton target at CLAS" (*Phys.Lett.* B768 (2017) 168-173).

Member of the CLAS paper review committee for the "First Measurement of the Polarization Observable E in the $p(\gamma, \pi^+)n$ Reaction up to 2.25 GeV" (*Phys. Lett.* B750 (2015) 53-58).

Member of the CLAS paper review committee for the "First Measurement of the helicity asymmetry E in eta photoproduction on the proton" (*Phys. Lett.* B 755 (2016) 64).

Member of the CLAS paper review committee for the measurement "Cross section for the exclusive photon electroproduction on the proton and Generalized Parton Distributions" (*Phys.Rev.Lett.* 115 (2015) 21, 212003).

Outreaching activity

In parallel to my research activity, during the last years I was involved in different outreaching projects, devoted to the dissemination of science in schools and to the open public. The projects range from seminars and guiding activity in tours through the *Laboratori Nazionali di Frascati* of INFN to collaboration to *Scienza Per Tutti*, the outreaching website of INFN. In addition to it, since April 2017 I joined the *Extreme Energy Events* (EEE) Project led by Centro Fermi, main goal of which is the dissemination of Science in high-schools by involving students in the management and operations of a network of MRPC-based telescopes for the detection of extensive showers from cosmic rays. Since January 2021 I am the **Outreach Coordinator** of the EEE Project and, in this role, I plan, organize and coordinate several activities for students. In particular, I organize monthly meetings, bi-annual (in the pre-COVID era) workshops in person where students attend masterclasses and participate to measurement campaigns, and coordinate the different research projects carried on by schools. As to the relation between research and industry, in 2006 I attended a master on technology transfer, the goal of which was to form researchers for a better cooperation with industries and an increased sensitivity to the industrial impacts of the technologies developed in fundamental research projects.

- 06/2021 **ScienceTogether:** Verso la Notte Europea dei Ricercatori 2021. Presenter at the Urban trekking *Che aria tira a Roma?*
- 05/2021 **Festival Genius Loci - Open City Roma:** organizer of the activities at Centro Fermi for the 2021 edition of *Genius Loci - Dove abita il genio*. In particular, two events have been organized: a guided tour in the historical building together with a visit to the Museum, and a campaign measurement devoted to the study of cosmic rays, performed through scintillator-based portable cosmic ray detectors.
- 01/2021 - present **Outreach coordinator** for the Extreme-Energy Events (EEE) Project.
- 2018, 2020 **Talk** at the *International day of women and girls in science* in the 2018 and 2020 editions - Laboratori Nazionali di Frascati
- 07/2020 **Festival Genius Loci - Open City Roma:** organizer of the activities at Centro Fermi for the 2020 edition of *Genius Loci - Dove abita il genio*, consisting in guided tours in the historical building and visits to the Museum
- 6/2018 - present **Responsible** for the Centro Fermi Project "EEE" for the relations with schools (managing of the monthly meetings and of the bi-annual conferences ("*Conferenze dei Progetti del Centro Fermi/Progetto EEE*"), organization of contests for encouraging independent, scientific activities in the institute, as the *Cosmic Box Contest*).
- April 2017 - present **Local referent for the Project EEE.** In this role, I am responsible of the maintenance of the 5 *Multigap Resistive Plate Chamber* (MRPC)-based telescopes in the area and of the related activity of the 11 Lazio schools participating to the project. I carried on a consistent outreaching activity organized in lessons, practical demonstrations on the MRPC operations and maintenance and seminars.
- March 2017 **Moderator** for an ALICE masterclass at CERN during the International Masterclasses 2017.
- 2015 - 2018 **Member of the editor committee** of *Scienza per Tutti*, the science communication website of INFN. Beyond the activity as editor, I answered to some of the questions for the section *Chiedi all'Esperto*:

1. <http://scienzapertutti.infn.it/chiedi-allesperto/tutte-le-risposte/2115-0452-cosa-significano-i-valori-2-3-1-3-che-si-accompagnano-ai-quark>
2. <http://scienzapertutti.infn.it/chiedi-allesperto/tutte-le-risposte/2094-0449-terra-e-luna3>
3. <http://scienzapertutti.infn.it/chiedi-allesperto/tutte-le-risposte/2078-0444-perche-il-campo-elettromagnetico-diminuisce-con-la-distanza>
4. <http://scienzapertutti.infn.it/chiedi-allesperto/tutte-le-risposte/2083-0439-fisica-quantistica>
5. <http://scienzapertutti.infn.it/chiedi-allesperto/tutte-le-risposte/1984-0427-luce-polarizzata-e-spin-dei-fotoni>

and wrote some book reviews:

1. <http://scienzapertutti.infn.it/rubriche/un-libro-al-mese/2089-fisica-quantistica-per-poeti>
2. <http://scienzapertutti.infn.it/rubriche/un-libro-al-mese/2121-breve-storia-di-quasi-tutto>

- 2015-present **Invited seminars** on quantum mechanics and fundamental interactions in high-schools.
- 2012-present **Guide** in Laboratori Nazionali di Frascati for schools and open public visits, also taking part to different editions of *La Notte dei Ricercatori* and the LNF-INFN *Open Day*.
- 2006 Participation to the master on **Spin-off accademici, innovazione e trasferimento tecnologico** organized by CERFE and the three universities of Rome ("La Sapienza", "Tor Vergata" and "Roma Tre").

Research activity

- Electroweak physics** I joined as an undergraduate student the Babar group of the “Sapienza” University of Rome, where I performed my undergraduate thesis. It was devoted to the measurement of the branching ratio of the charmless semileptonic B decay $B \rightarrow \omega l \nu$ for the extraction of the V_{ub} CKM matrix element.
- Hadronic physics** As a graduate student I moved to the field of hadronic physics. For my thesis I developed a phenomenological model for the electromagnetic nucleon form factors $G_E^N(Q^2)$, $G_M^N(Q^2)$, based on the Light-Front Hamiltonian Dynamics. Its main result consists in identifying in the interference among *valence* and *non-valence* processes a possible source of the discrepancy experimentally observed in the measured ratio $G_E^p(Q^2)/G_M^p(Q^2)$. It led to the publication of the paper Phys. Lett. B **671** (2009) 153. Following the Ph.D. work, during my first years of postdoc (Austria, Brazil) I carried on the modeling of the hadron structure, extending the techniques developed for the nucleon to the vector mesons sector (Nucl. Phys. Proc. Suppl. **199** (2010) 270).
- As a natural extension of my phenomenological work on the hadron structure, in 2008 I joined the CLAS Collaboration at JLab (Virginia, USA) and I started to work on the analysis of data finalized to the extraction of the different functions describing the multidimensional nucleon structure. I spent the first two years working as a postdoc at the IPN (Orsay, France), where I performed the measurement of the single and double-spin asymmetries for the Deeply-Virtual Compton Scattering. The latter represents the cleanest path toward the extraction of the Generalized Parton Distributions, phenomenological functions that relate the information encoded in the one-dimensional parton distribution functions (PDFs) to the electromagnetic form factors. This measurement (published in Phys. Rev. D **91** (2015) 052014 and Phys. Rev. Lett. **114** (2015) 032001) provided a first comparison of the *electric* and *axial* charge distribution inside the nucleon. In view of the upgrade of the CLAS detector toward the 12-GeV Jefferson Lab operations, I proposed as a **spokeperson** two measurements finalized to the extraction of single and double-spin asymmetries for the Deeply-Virtual Compton Scattering on neutron targets: one on an unpolarized target (*Deeply-Virtual Compton Scattering on the neutron with CLAS12 at 11 GeV* (PR12-11-003)) and one on a longitudinally polarized ND_3 target (*Deeply virtual Compton scattering on the neutron with a longitudinally polarized deuteron target* (PR12-06-109a)).
- In 2011 I joined the INFN group at Laboratori Nazionali di Frascati, keeping my involvement in CLAS. During the years in Frascati I extended my research activity in the field of hadron structure to the *fragmentation* phenomena and to the 3D representation of the nucleon structure in the momentum space, the former being encoded in the *Fragmentation Functions* (FFs) and the latter in the *Transverse Momentum Dependent* distribution functions (TMDs). In this field, I collaborated to the first measurement of the Beam-Spin Asymmetry for the Semi-Inclusive production of hadron pairs, published in Phys. Rev. Lett. **126** (2021) 6, 062002. I also proposed, as **principal investigator**, a new measurement for the 12-GeV operations, that aims at the first extraction, in the *valence region*, of the quark fragmentation functions in hadron pairs. In view of the experience matured in the field of quark hadronization and hadron formation mechanisms, in 2015 I was invited by the *European Physics Journal A* to write a review on the subject in cooperation with Dr. Marco Radici (INFN Pavia, Italy). It appears in the special issue "3D Structure of the Nucleon" (*Di-hadron fragmentation and mapping of the nucleon structure*, Eur. Phys. J. A **52** (2016) no.6, 155).

Hadronic physics

Recently, I started to explore new phenomena that possibly occur inside the nucleon, as the presence of correlated $q\bar{q}$ pairs. By analyzing the emergence of azimuthal correlations among the *current* and the *target* fragments, the presence of these correlations can be explored. The latter would results, indeed, in a Beam-Spin Asymmetries, a preliminary measurement of which can be found in PoS(DIS2016)214.

Thanks to the experience maturated in the field over the last years, I was invited to several conferences and workshops to give invited talks. In 2016 I also served as *convener* for the "Spin Physics" Working Group at the *24th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS2016)* and for the session on "QCD and partonic phenomena" at the *26th International Nuclear Physics Conference (INPC2016)*.

Heavy-ion physics

As a natural extension of my research activity in the field of the nucleon structure, in December 2016 I joined the Alice Collaboration at CERN, moving my focus to heavy-ion physics. I started working on the *Light-Flavor Working Group*, where I am presently responsible of the analysis for the extraction of the spectra of $\pi/K/p$ on the pPb 8.16-TeV data. Results on pPb data will be then compared to measurements on pp and $PbPb$ data to test the emergence of possible initial state effects.

Responsabilities: I am the analysis coordinator of the three analyses carried on in Frascati: in order to extract the spectra in the broadest momentum range, indeed, analyses with the Inner Tracking System, the Time-Projection Chamber and the Time Of Flight detectors are being performed, so to combine the complementary spectra in the different p_T regions. Beyond the coordinating activity, I am personally working on the TPC analysis. The preliminary results of the three analyses have been approved and they have been firstly presented at the conference "*Strangeness in Quark Matter 2019*". I then personally presented them at "*Quark Matter 2019*".

Beyond the analysis activity, I took shifts both as *Detector Control System* operator (for which I have the *expert* status for *Heavy-Ion* runs) and *Data Quality Monitor* shifter.

Cosmic ray physics

In April 2017, I joined the EEE experiment, a network of MRPC-based telescopes for the detection of *Extreme Energy Events* in cosmic rays. Within the collaboration I am the local responsible for the operations of the 5 telescopes in Lazio region. Together with the hardware activity related to the recommissioning and maintenance of the MRPCs, I work on data analysis for the search of long-distance correlations (Eur.Phys.J.Plus 133 (2018) no.2, 34) and on the simulations of the MRPC telescopes in the Geant4 environment.

Detector physics

Parallel to my reasearch activity in data analysis in the hadronic physics field, during my career I took part to different hardware-oriented researches. In particular, during 2007 I joined the H8RD22 collaboration to study *channeling phenomena* of hadron beams through bent crystals, that represent a strategic approach in the beam collimation technology. The collaboration led to two publications (Phys. Rev. A **79** (2009) 012903, Phys. Rev. Lett. **101** (2008) 234801). As to detector-oriented activity, I collaborated to the realization of two of the CLAS12 subdetectors. During my postdoc in Orsay I took part to the design of the *Central Neutron Detector* for CLAS12, finalized to the detection of the large-angle neutron produced in the Deeply-Virtual Compton Scattering processes. In particular, I performed the tests for the optimization of the photon detectors employed to read the scintillator signals.

Detector physics Once in Frascati, I joined the efforts for the realization of a RICH detector for CLAS12. It represents a strategic piece for the identification of charged hadrons in the $3\div 8$ -GeV energy range, *i.e.* the regime where the events of interest for TMD analysis lie. Here I was the responsible for the RICH simulations in the *Geant4* environment, finalized to the optimization of materials, to the analysis of *radiation hardness* effects and to the definition of the event reconstruction procedures. I also took part to measurements at the *Frascati Neutron Generator* (FNG) (ENEA) to test radiation effects on the photo-multipliers and on the read-out electronics and to the ones at the *Beam-test Facility* (BTF) of LNF to test reconstruction algorithms on a prototype. Selected results from these activities appear, *e.g.*, in Eur. Phys. J. A **52** (2016) no.2, 23 and Nucl. Instrum. Meth. A **790** (2015) 28.

Since April 2017 I am part of the EEE Collaboration, where I am the responsible for the operations of the Multigap Resistive Plate Chamber telescopes taking data in Lazio region (5 telescopes). Together with the maintenance and recommissioning activity of the telescopes, on January 2018 I took part to a measurement campaign at CERN aiming at the study of new eco-gas mixtures, participating both to the data taking and analysis, the results of which I presented at *The XIV Workshop on Resistive Plate Chambers and Related Detectors (RPC 2018)*.

Commissioning During my years in the CLAS Collaboration I took care of the *Time-Of-Flight* calibration for different data sets, taken both on *unpolarized* liquid-hydrogen targets and on *longitudinally-polarized* NH_3 targets. In preparation for CLAS12 operations, then, I was in charge of the rate analysis for the different processes finalized to the detector commissioning and calibrations. I developed an inclusive and semi-inclusive event generator based on cross-section calculations and a software framework to extract rates and cross-sections in the different kinematic points.

Schools

- 2011 **Three-dimensional partonic structure of the nucleon** for *International School of Physics "Enrico Fermi"*; Varenna (Italy).
- 2009 **Strong interaction in nuclear medium: new trends** for *Ecole International "Joliot Curie"*; Lacanau (France).
- 2006 **Spin-off accademici, innovazione e trasferimento tecnologico** organized by CERFE and the three Rome universities ("*La Sapienza*", "*Tor Vergata*", "*Roma Tre*"); Rome (Italy).

Teaching

- 2004/2005 **Assistant** in the physics class for *Biology degree* at Rome University La Sapienza (Italy).

Languages

Italian	Native.
English	Excellent in oral and written communication.
French	Very good in oral and sufficient in written communication.

Conferences, workshops and seminars

- **2021: Contributed talk** at *The 19th International Conference on Hadron Spectroscopy and Structure (HADRON2021)*, Mexico City (Mexico) - online edition; title: Looking for collective phenomena in small systems with a comprehensive study of light flavour hadron production.
- **2021: Invited talk** at *The Ninth Annual Large Hadron Collider Physics (LHCP2021)*, Paris (France) - online edition; title: EEE - Extreme Energy Events.
- **2019: Contributed talk** at *the XXVIIIth International Conference on Ultra-relativistic Nucleus-Nucleus Collisions (Quark Matter 2019)*, Wuhan (China); title: Light-flavour hadron production vs. multiplicity in pp and in p-Pb collisions with ALICE.
- **2018: Invited talk** at *Correlations in Partonic and Hadronic Interactions 2018 (CPHI2018)*, Yerevan (Armenia); title: Light Flavors.
- **2018: Contributed talk** at *The XIV Workshop on Resistive Plate Chambers and Related Detectors (RPC 2018)*, Puerto Vallarta (Mexico); title: New Eco-gas mixtures for the Extreme Energy Events MRPCs: results and plans.
- **2016: Invited talk** at *4th Workshop on the QCD Structure of the Nucleon - QCD-N'16*, Getxo (Bilbao), Spain; title: TMDs from Jefferson Lab Hall B.
- **2016: Summary talk** for the Spin Physics Working Group at *24th International Workshop on Deep-Inelastic Scattering and Related Subjects - DIS2016*, Desy, Hamburg, Germany; title: Spin Physics Working Group Summary (proceedings in PoS(DIS2016)284).
- **2015: Invited talk** at *10th Circum-Pan-Pacific Spin Symposium on High Energy Spin Physic - Pac-Spin2015*, Taipei, Taiwan; title: Studies of nucleon GPD properties at JLab.
- **2015: Invited talk** at *Light Cone 2015 - LC2015*, Laboratori Nazionali di Frascati, Frascati, Italia; title: OAM Measurements from DVCS at JLab (proceedings in Few Body Syst. **57** (2016) no.8, 633).
- **2015: Invited talk** at *First Italian Workshop on Hadron Physics and Non-Perturbative QCD - NPQCD2015*, Cortona, Italia; title: GPDs in experiments.
- **2014: Invited talk** at *The Fourth Joint Meeting of the Nuclear Physics Divisions of the American Physical Society and The Physical Society of Japan - Hawaii 2014*, Hawaii Big Island, USA; title: 3D imaging of the nucleon with JLab experiments.
- **2014: Invited talk** at *ELBA XIII Workshop on Electron-Nucleous Scattering*, Isola d'Elba, Italia; title: Experimental investigation of the nucleon transverse structure".
- **2014: Invited talk** at *Fourth International Workshop on Transverse Polarisation Phenomena in Hard Processes - TRANSVERSITY 2014*, Chia, Cagliari, Italia; title: The JLAB 3D program at 12 GeV (TMDs + GPDs) (proceedings in EPJ Web Conf. **85** (2015) 02033).
- **2013: Invited talk** at *Indiana-Illinois Workshop on Fragmentation Functions*, Bloomington, Indiana, USA; title: Spin physics in CLAS6 and plans for CLAS12.
- **2013: Invited talk** at *Second Workshop on Probing Strangeness in Hard Processes - PSHP2013*, Frascati, Italia; title: JLab news on TMD observables.
- **2013: Invited talk** at *13th International Conference on Meson-Nucleon Physics and the Structure of the Nucleon (MENU 2013)*, Roma, Italia; title: Di-hadron SIDIS measurements at CLAS (proceedings in EPJ Web Conf. **73** (2014) 02008).

- **2012: Contributed talk** at *Second European Nuclear Physics Conference - EuNPC2012*, Bucarest, Romania; title: Analyzing nucleon spin structure through SIDIS at Jefferson Lab.
- **2011: Contributed talk** at *9th European Research Conference on Electromagnetic Interactions with Nucleons and Nuclei, EINN2011*, Paphos, Cyprus; title: DiHadron Analysis at CLAS.
- **2011: Contributed talk** at *XCVII Congresso della Società Italiana di Fisica*, L'Aquila, Italia; title: Studio della produzione di due adroni con CLAS12 al Jefferson Lab.
- **2011: Contributed talk** at *DiHadron Fragmentation Functions Miniworkshop*, Pavia, Italia; title: First look at the DiHadron Production with the 6 GeV CLAS data.
- **2011: Contributed talk** at *DIS2011*, Newport News, Virginia, USA; title: Results and Achievements at CLAS.
- **2010: Contributed talk** at *QCD10*, Montpellier, Francia; title: Generalized Parton Distributions at CLAS (proceedings in Nucl. Phys. Proc. Suppl. **207-208**, 69-72 (2010)).
- **2010: Contributed talk** at Les Journées P2I, Parigi, Francia; title: Deeply Virtual Compton Scattering on the neutron at JLab with CLAS12.
- **2009: Contributed talk** at *12th International Conference on Nuclear Reaction Mechanisms*, Varenna, Italia; title: Generalized Parton Distributions at CLAS (proceedings in <https://cdsweb.cern.ch/record/1233497/files/CERN-Proceedings-2010-001-V-2.pdf>).
- **2007: Contributed talk** at *HADRON07 - XII International Conference on Hadron Spectroscopy*, Frascati, Italia; title: Electromagnetic decays of Vector Mesons in a covariant model.
- **2006: Contributed talk** at *XI Convegno su Problemi di Fisica Nucleare Teorica* Cortona, Italia, con il titolo Electromagnetic form factors of the nucleon in spacelike and timelike regions).
- **2008: Invited seminar** at University of Rome Tor Vergata; title: Time- and Spacelike Nucleon Electromagnetic Form Factors beyond Relativistic Constituent Quark Models.
- **2007: Invited seminar** at the “Karl Franzens” University in Graz; title: Electromagnetic form factors of the nucleon in spacelike and timelike regions.
- **2013: Poster** at *10th European Research Conference on Electromagnetic Interactions with Nucleons and Nuclei, EINN2013*, Paphos, Cyprus; title: Di-hadron SIDIS measurements at CLAS.
- **2011: Poster** at *9th European Research Conference on Electromagnetic Interactions with Nucleons and Nuclei, EINN2011*, Paphos, Cyprus; title: DiHadron Analysis at CLAS. As the winner of the Best Poster competition organized by the International Organizing Committee (IOC), I also presented a talk on the subject at the conference, and I have been awarded with the supported invitation to the next edition.

Habilitations

- 2015 Eligibility for the position of **Ricercatore a Tempo Determinato** (RTD) for the sector *02/A2, PROFILE: SSD FIS/02* at Pavia University (Italy).
- 2018 Idonea non vincitrice al concorso presso il Centro Fermi (Bando n. 9(17) - Concorso pubblico, per titoli ed esami, per l'assunzione di n. 1 unità di personale con contratto di lavoro a tempo pieno e indeterminato) pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana, 4° Serie Speciale - Concorsi ed Esami, n. 5 del 16 gennaio 2018.

Information Technology Skills

- Deep knowledge of the ROOT analysis framework, C, C++, FORTRAN, shell scripting languages.
- Good knowledge of GEANT4, JAVA, PERL, L^AT_EX, common office software, Linux, Windows, Android and Mac OS.

Publications

Co-author of 174 publications in referred journals (see list of publications for details).

Silvia Pisano