

CURRICULUM VITAE of MARCO RADICI

PERSONAL DATA

- Senior Staff Researcher (Primo Ricercatore)
- INFN - Sezione di Pavia
- Contract Professor, course “Fisica Nucleare”, Master Degree in Physics at University of Pavia
- Office phone: +39 0382 987451
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EDUCATION

- 19-09-1989 Ph.D. in Physics at University of Pavia, thesis *Correnti di scambio e reazioni di knockout*; supervisor prof. S. Boffi
- 1986-1988 attending various international schools among which:
 - ”Winter School on Hadronic Physics at Intermediate Energy”, Folgaria (1986);
 - ”4th Students’ workshop on Electromagnetic Interactions”, Bosen (1987);
 - ”International School of Nuclear Physics”, Erice (1988)
- 1985-1988 Ph.D. studies in Physics at University of Pavia
- 18-02-1985 Graduation in Physics (score 110/110 summa cum laude) at University of Pavia; diploma thesis *Correnti di scambio mesoniche nello scattering elettrone-nucleo profondamente anelastico*; supervisor prof. S. Boffi
- 1980 High school degree (Maturità classica, Liceo Ginnasio *Paolo Sarpi*, Bergamo)

PROFESSIONAL EXPERIENCE

- Sept. 2021 - present Contract Professor at University of Pavia, teaching “Fisica Nucleare”, Master Degree in Physics at University of Pavia
- Oct. 2012 - Sept. 2021 Contract Professor at University of Pavia, teaching “Fisica Nucleare II”, Master Degree in Physics at University of Pavia
- Jul. 2012 - Jul. 2022 Habilitation to Full Professor in Theoretical Physics of Fundamental Interactions (settore 02/A2; Decreto Direttoriale n. 222 20 July 2012)

- Jan. 2007 - present Senior Staff Researcher (Primo Ricercatore) at INFN - Pavia unit
- Oct. 2004 - Sept. 2012 Contract Professor at University of Pavia, teaching “Fisica Adronica”, Master Degree in Physics at University of Pavia
- Sept. 1992 - Dec. 1992 *Visiting Scientist* at University of Illinois at Urbana-Champaign (Illinois - USA), member of the research group of prof. V. Pandharipande
- Sept. 1991 - Dec. 1991 *Visiting Scientist* at University of Illinois at Urbana-Champaign (Illinois - USA), member of the research group of prof. V. Pandharipande
- Dec. 1988 - Dec. 2006 Staff Researcher (Ricercatore) at INFN - Pavia unit

SCIENTIFIC ACTIVITY

I first focused on the theory of electromagnetic knockout reactions in atomic nuclei, studying the effects of short- and long-range correlations among nucleons that emerge in the nuclear spectral density and related spectroscopic factors.

Later, I turned to the analysis of electromagnetic form factors of the nucleon and its resonances using relativistic covariant quark models, mostly in collaboration with the group of prof. W. Plessas in Graz (Austria).

More recently, I approached the phenomenology of azimuthal (spin) asymmetries in hard reactions like deep-inelastic scattering, electron-positron annihilations and hadronic collisions.

In particular, I pioneered systematic studies of the properties of di-hadron fragmentation functions, performed the first ever extraction of them from experimental $e^+ - e^-$ annihilation data, and used them in the first ever extraction of the transversity parton distribution in the collinear framework from semi-inclusive di-hadron production in both polarized deep-inelastic scattering and hadronic collisions.

I also worked on the extraction of the unpolarized parton distribution when including information on the parton transverse momentum, by performing for the first time a global fit of the largest data set from all hard reactions.

I participated in writing proposals for various (approved) experiments at Jefferson Lab (Newport News - Virginia, USA) about these topics, and for one of them I am also co-spokesperson. I am co-author of about 80 publications in international journals with peer-review, and of about 100 proceedings of international conferences and workshops. I delivered more than 130 talks, about 100 of which as invited talks. I am also coauthor of a book published by Oxford Univ. Press and of an article on *Le Scienze* (Italian translation of *Scientific American*).

Bibliometric parameters (updated at 11 June 2024)

- 80 papers on peer-review international journals
- 101 published proceedings of workshops and conferences
- 132 talks and seminars at national and international conferences/workshops, about 100 invited
- 14 reports, white papers and various publications, 1 book, 1 conference report
- 6 experimental proposals of which 1 as spokesperson
- citations: 7005 (inSPIRE), 7677 (Google Scholar), 4157 (Scopus)
- h-index: 42 (inSPIRE), 43 (Google Scholar), 36 (Scopus)
- n. papers with 500+ citations: 2; with 250+ : 2, with 100+ : 15 (inSPIRE)

APPOINTMENTS AND RESPONSIBILITIES

Coordination of Research Projects

- 1 Sept. 2023 - present Chair of the Electron-Ion Collider (EIC) Users Group Steering Committee.
- 1 Apr. 2023 - present Member of the Collaboration Council of the ePIC Collaboration.
- 2023 Local Coordinator for the Pavia unit of the INFN experimental project EIC.NET (CSN3).
- 1 Sept. 2021 - 31 Aug. 2023 Vice-Chair elected of the Electron-Ion Collider (EIC) Users Group Steering Committee.
- 29 Apr. 2021 - 31 Dec. 2023 Convener elected of the Working Group for Semi-Inclusive processes at the EIC, formerly within the experimental proto-collaboration ATHENA (www.athena-eic.org) until 1 Dec. 2021, then within the newly formed ePIC experimental collaboration to realize the EIC Project Detector.
- 19 Dec. 2019 - 11 Mar. 2021 Editor of the EIC Users Group Yellow Report ([arXiv:2103.05419](https://arxiv.org/abs/2103.05419)) summarizing one year of scientific and technological studies of the EICUG community to define the baseline EIC project detector.
- 5 Mar. 2020 - present Member of the EIC Users Group Charter Review Committee.
- 27 Apr. 2020 - present Theory Contact Person for the INFN experimental project EIC.NET (CSN3).

- 1 Jan. 2017 - 31 Dec. 2020 Member elected of the first EIC Users Group Steering Committee.
- 1 Jan. 2017 - present Local coordinator for the Pavia unit of the INFN theoretical project NINPHA (CSN4).
- 15 Jun. 2016 - present Member of the EIC Users Group Institutional Board, representing the INFN - Pavia and the Dept. of Physics - University of Pavia
- 15 Jul. 2015 - 31 Dec. 2020 National Coordinator of INFN theoretical project 3DSPIN (CSN4), connected to the ERC Consolidator project *3DSPIN - 3-Dimensional Maps of the Spinning Nucleon* funded by EU Community under the Horizon 2020 programme, contract n. 647981
- 1 Jan. 2014 - 31 Dec. 2016 National Coordinator of INFN theoretical project NINPHA (CSN4), top-score rated in both 2013 and 2016 evaluations of all INFN-CSN4 projects by external referees
- 2009 - 2016 Spokesperson for Theoretical Hadronic Physics activities within the INFN - Thomas Jefferson National Accelerator Facility (Jefferson Lab - Virginia - USA) Memorandum of Understanding
- 1 Jan. 2008 - 31 Dec. 2013 National Coordinator of INFN theoretical project AD31 (Structure of hadrons and of cold hadronic matter)
- 2008 - 2011 Local Coordinator for Network *TMD-Net - Mapping out the Transverse Structure of the Nucleon* in Work Package 3 of project *HadronPhysics2: Study of Strongly Interacting Matter* (www.hadronphysics2.eu/) funded by EU Community under the FP7 programme, contract n. 227431
- 2004 - 2007 Local Coordinator for Network N7 *Transversity: exploring the unknown transverse spin structure of the Nucleon* of project *Integrated Infrastructure Initiative in Hadronic Physics* (I3HP, www.infn.it/eu/i3hp/) funded by EU Community under the FP6 programme, contract n. RII3-CT-2004-506078
- 2005 - 2006 Responsibility of theoretical Working Group *Fisica di e^+e^- ai Laboratori Nazionali di Frascati*, INFN Roadmap for the decade 2006 - 2016.

Participation in Research Projects

- 28 Sept. 2023 - 27 Sept. 2025 Member of the PRIN2022 project "ProtoTaste – Tasting the flavor of the proton in its full dimensions", funded by Italian MIUR, contract n. 20225ZHA7W, total funding 209.458 Euro

- 2019 - 2024 Member of the Pavia unit for Work Package JRA4 *TMD-Next - 3D Structure of the Nucleon in momentum space: opening the next stage* of project *STRONG2020: Study of Strongly Interacting Matter* (www.strong-2020.eu/) funded by EU Community under the Horizon 2020 programme, contract n. 824093
- 2016 - present Member of the Electron-Ion Collider Users Group (EICUG)
- 2011 - 2014 Member of the Pavia unit for Work Package WP29 *3D-Mom* of Joint Research Activity *HadronPhysics3: Study of Strongly Interacting Matter* (www.hadronphysics3.eu/) funded by EU Community under the FP7 programme, contract n. 283286
- 2009 - 2010 Member of the Pavia unit of project PRIN 2008EKLACK *Struttura del nucleone: momento trasverso, spin trasverso e momento angolare orbitale* funded by Italian MIUR under the PRIN 2008 programme
- 2004 - 2007 Member of the Pavia unit for the Network N5 *HadronicTh: Structure and Dynamics of Hadrons* and Joint Research Activity JRA5 *GPD: Generalized Parton Distributions* of the project *Integrated Infrastructure Initiative in Hadronic Physics* (www.infn.it/eu/i3hp/) funded by EU Community under the FP6 programme, contract n. RII3-CT-2004-506078
- 2004 - 2006 Member of Pavia unit of the project *Fisica teorica del nucleo e dei sistemi a molti corpi*, funded by Italian MIUR under the PRIN 2003 programme
- 2004 - present Associated Member of the European Centre for Theoretical Studies in Nuclear Physics and Related Areas (ECT*, Trento)
- 2002 - present Member of the Users Group of Jefferson Lab, Newport News (Virginia - USA)
- 2001 - 2003 Member of Pavia unit of the project *Fisica teorica del nucleo e dei sistemi a molti corpi*, funded by Italian MIUR under the PRIN 2001 programme
- 2000 - 2003 Member of the Pavia unit for the Research Training Network *ESOP: Electron Scattering Off Partons*, funded by EU Community under the FP5 programme, contract n. RTN1-1999-00117
- 1999 - 2001 Member of Pavia unit of the project *Fisica teorica del nucleo e dei sistemi a molti corpi*, funded by Italian MIUR under the PRIN 1999 programme
- 1997 - 1999 Member of Pavia unit of the project *Fisica teorica del nucleo e dei sistemi a molti corpi*, funded by Italian MIUR under the PRIN 1997 programme
- 1996 - 2000 Member of the Pavia unit for the Training and Mobility of Researchers Network *HaPHEEP*, funded by EU Community under the FP4 programme, contract n. ERBFMRXCT96-0008

- 1989 - present Member of the Italian Society of Physics (SIF)

Service offices at Research Institutions

- 2023 - 2028 Member of the Program Advisory Committee of the Jefferson Lab. (Newport News, Virginia - USA)
- Feb. 2023 - present Member of the Topical Working Group 6 - Research Infrastructures for the NuPECC Long Range Plan 2024
- 1 Jan. 2020 - present Member of the Teaching Board of the Ph.D. School in Physics, University of Pavia
- 2012 - 2024 INFN representative in the Scientific Board of Chemistry, Pharmacy and Physics joint Library (CSB1) of University of Pavia.
- 2008 - 2012 INFN representative in the Scientific Board of Biblioteca delle Scienze unificata, University of Pavia
- 22 Jun. 2005 - 21 Jun. 2011 Coordinator of INFN Theoretical activities of Pavia unit, member of the INFN National Theoretical Board (CSN4), referee of Theoretical activities in Hadronic and Nuclear Physics, member of "Sergio Fubini" Prize Committee
- 2003 - 2008 INFN representative in the Scientific Board of Physics Library, University of Pavia
- 1993 - 1999 Representative elected of Researchers of INFN Pavia unit

Review and Selection Committees

- 2022 Member of Selection Committee for n. 1 assegno di ricerca *Studio della struttura interna del protone con particolare enfasi sulle Transverse Momentum Distributions partoniche*, Dept. of Physics - University of Pavia
- 2020 Member of Selection Committee for n. 1 assegno di ricerca *Struttura di spin e di massa degli adroni (studio delle proprietà di momento angolare e di massa degli adroni attraverso osservabili di processi di diffusione esclusivi ad alta energia)*, Dept. of Physics - University of Pavia
- 2020 Referee for Call 2020 of scientific projects of Agence Nationale de la Recherche (ANR - France)
- 2019 External expert of Review Committee for promotion to Associate Professor, Dept. Physics - University of Duquesne (Pittsburgh - USA)

- 19 Oct. 2018 - 31 Dec. 2018 Member of the Referee Committee for the INFN project FELLINI n. 20019/2018, cofunded by Horizon 2020 Marie Skłodowska-Curie Actions COFUND, grant agreement n. 754496,
- 2017 Member of Selection Committee for n. 1 assegno di ricerca *Mappatura tridimensionale del nucleone nello spazio dei momenti (studio delle proprietà delle trasverse momentum distributions e loro estrazione dai dati sperimentali)*, Dept. of Physics - University of Pavia
- 2016 Member of Selection Committee for INFN post-doc theoretical position at INFN Roma unit on *Hadron Physics*
- 2016 External Expert of Review Committee for Ph.D. in Physics at Indian Institute of Technology (Bombay - India) of dr. V.K. Ojha, thesis "Wigner Distributions and Orbital Angular Momentum of Quark and Gluon"
- 2016 External Expert of Review Committee for promotion to Associate Research Scientist, Dept. Phys. University Indiana (Bloomington - Indiana - USA)
- 2015 - present Referee of projects for the Early Career Research Program of US Dept. of Energy - Office of Science
- 2015 Member of the Selection Committee for admission to the Ph.D. School in Physics, XXXI class, University of Pavia
- 2015 Member of Selection Committee for n. 1 assegno di ricerca *Mappatura tridimensionale del nucleone nello spazio dei momenti (studio delle proprietà delle trasverse momentum distributions e loro estrazione dai dati sperimentali)*, Dept. of Physics - University of Pavia
- 2015 Member of Selection Committee for n. 1 assegno di ricerca *Calcolo microscopico di un potenziale ottico per la diffusione elastica protone-nucleo*, Dept. of Physics - University of Pavia
- 2014 Member of Selection Committee for INFN post-doc theoretical position at INFN Genova unit on *Phenomenology of Hadron Physics*
- 2013 - present Referee of research projects for National Science Foundation (NSF - USA).
- 2013 Referee of research projects for MIUR programme PRIN - Futuro in Ricerca 2013
- 2013 Chair of Selection Committee for INFN post-doc theoretical position at INFN Pavia unit on *Hadronic Physics and applications*
- 2013 - 2015 Member of Selection Committee for INFN assegni di ricerca

- 2012 Member of Review Committee of scientific programme of PANDA Collaboration (INFN - CSN3)
- 2011 - 2013 Referee of scientific projects for Stichting voor Fundamenteel Onderzoek der Materie (FOM - Foundation for Fundamental Research on Matter), Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO - Dutch Research Council)
- 2006 - 2011 Referee of INFN Theoretical Hadronic and Nuclear Physics projects (CSN4)
- 2007 - 2009 Member of Selection Committee for INFN assegni di ricerca
- 2006 - 2008 Member of the Selection Committee for INFN National Award "Sergio Fubini"
- 2002 External expert of Review Committee for Ph.D. in Physics at Vrije Universiteit - Amsterdam (The Netherlands) of dr. A. Bacchetta, thesis "Probing the transverse spin of quarks in deep inelastic scattering"
- 2001 Member of the Review Committee for Ph.D. Degree in Physics, XV class, University of Pavia

Referee and Editorial activities for Peer Review International Journals

- 2020 - 2026 Member of Editorial Board of Eur. Phys. J. Plus (EPJP)
- 2020 - present Referee for Adv. High Energ. Phys., Hindawi Publishing Corp
- 2015 - present Referee for scientific journals Eur. Phys. J. A, C, Plus Springer - Verlag.
- 2004 - present Referee for scientific journals Nucl. Phys A and Phys. Lett. B
- 2004 - present Referee for scientific journals J. Phys. G and J. Phys. Conf. Series of Institute of Physics Publishing (IOP)
- 2003 - present Referee for scientific journals Phys. Rev. D and Phys. Rev. Lett. of American Physical Society

Organization of Workshops and Scientific Activities

- 22 - 27 July 2024 Member of Organizing Committee of "Electron-Ion Collider Users Group Summer Meeting 2024 (EICUG 2024)", 22-27 July 2024 Bethlehem (Pennsylvania - USA)
- 01 - 05 July 2024 Member of the International Advisory Committee of "The 4th EIC-Asia Workshop", 01-05 July 2024 Shanghai (China)

- 03 - 07 June 2024 Member of the International Advisory Committee of "7th International Workshop on Transverse Polarization Phenomena in Hard Scattering (Transversity 2024)", 03-07 June 2024 Trieste (Italy)
- 27 - 31 May 2024 Member of Organizing Committee of "QCD Evolution 2024", 27-31 May 2024 Pavia (Italy)
- 29 Jan. - 09 Feb. 2024 Member of Organizing Committee of "International School and Workshop on Probing Hadron Structure at the Electron-Ion Collider", 29 Jan. - 09 Feb. 2024 ICTS Bangalore (India)
- 24 - 31 July 2023 Member of Organizing and Advisory Committees of "Electron-Ion Collider Users Group Summer Meeting 2023 (EICUG 2023)", 24-31 July 2023 Warsaw (Poland)
- 18 - 22 June 2023 Member of Organizing Committee of "1st European School on the Physics of the Electron-Ion Collider", 18-22 June 2023 Corigliano-Rossano (Cosenza, Italy)
- 5 - 7 June 2023 Member of Local Organizing Committee of "3rd Sardinian Workshop on Spin (Sar WorS 2023)", Pula (Cagliari, Italy)
- 17 - 19 May 2023 Member of the Organizing Committee of "1st International Workshop on a 2nd Detector for the Electron-Ion Collider", 17-19 May 2023 Philadelphia (Pennsylvania - USA)
- 6 - 8 Dec. 2022 Member of the Organizing Committee of "EICUG 2nd Detector meeting", 6-8 Dec. 2022 CFNS Stony Brook (New York - USA)
- 29 - 31 Aug. 2022 Member of the International Advisory Committee of "International workshop on Hadron Structure and Spectroscopy 2022 (IWHSS 2022)", 29-31 Aug. 2022 CERN Geneva (Switzerland)
- 2 - 6 Aug. 2021 Member of Organizing Committee of "Electron-Ion Collider Users Group Summer Meeting 2022 (EICUG 2022)", 26-30 July 2022 Stony Brook (New York - USA)
- 23 - 27 May 2022 Member of Local Organizing Committee of "6th International Workshop on Transverse Polarization Phenomena in Hard Scattering (Transversity 2022)", Pavia (Italy)
- 1 - 5 Nov. 2021 Member of Organizing Committee of INT workshop 21-80W "Fragmentation Functions 2021", INT - Seattle (USA), online
- 6 - 8 Sept. 2021 Member of Organizing Committee of "2nd Sardinian Workshop on Spin Studies (SarWorS 2021)", Cagliari (Italy)

- 2 - 6 Aug. 2021 Member of Organizing Committee of "Electron-Ion Collider Users Group Summer Meeting 2021 (EICUG 2021)", online
- 3 - 7 Aug. 2020 Member of Organizing Committee of "Electron-Ion Collider Users Group Summer Meeting 2020 (EICUG 2020)", Miami (Florida - USA), online
- 20 - 22 May 2020 Chair of Organizing Committee of "2nd Yellow Report EIC workshop", Pavia (Italy), online
- 25 - 29 Nov. 2019 Member of Organizing Committee of "6th Workshop on Resummation, Evolution, Factorization (REF 2019)", Pavia (Italy)
- 22 - 26 Jul. 2019 Member of International Advisory Committee of "Electron-Ion Collider Users Group Summer Meeting 2019 (EICUG 2019)", Paris (France)
- 8 - 10 Jul. 2019 Member of Organizing Committee of "1st Sardinian Workshop on Spin Studies (SarWorS 2019)", Cagliari (Italy)
- 11 - 13 Mar. 2019 Member of Organizing Committee of "Workshop on novel probes of the nucleon structure in SIDIS, e^+e^- and pp (FF 2019)", Durham (North Carolina - USA)
- 2 - 7 Sept. 2018 Convener of session *Hadron Structure, Spectroscopy and Dynamics* at "2018 European Nuclear Physics Conference (EUNPC 2018)", Bologna (Italy)
- 30 Jul. - 2 Aug. 2018 Member of International Advisory Committee of "Electron-Ion Collider Users Group Summer Meeting 2018 (EICUGM 2018)", Washington D.C. (USA)
- 19 - 22 Feb. 2018 Member of Organizing Committee of "Workshop on Fragmentation Functions (FF2018)", Stresa (Verbania - Italy)
- 11 - 15 Dec. 2017 Member of International Advisory Committee of "5th International Workshop on Transverse Polarization Phenomena in Hard Scattering (Transversity 2017)", INFN LNF - Frascati (Italy)
- 2 - 4 Sept. 2015 Convener of sessions *TMD fragmentation in e^+e^- and SIDIS processes, New channel productions in SIDIS and New data analysis methods*, at "TMDe2015 - A path towards TMD extraction", Trieste (Italy)
- 24 - 26 Mar. 2014 Member of Scientific and Organizing Committee of "Incontri Nazionali di Fisica Nucleare (INFN 2014)", Padova (Italy)
- 29 - 31 Oct. 2013 Convener of session *Structure of hadrons and hadronic matter* at "Cortona 2013 - XIV Convegno su problemi di Fisica Nucleare Teorica", Cortona (Arezzo - Italy)

- 10 - 14 Jun. 2013 Member of Organizing Committee of workshop "Structure of Nucleons and Nuclei", Como (Italy)
- 2 - 7 Jun. 2013 Member of Program Committee of "International Nuclear Physics Conference 2013 (INPC 2013)", Firenze (Italy)
- 12 - 14 Nov. 2012 Member of Scientific and Organizing Committee of "Incontri Nazionali di Fisica Nucleare (INFN 2012)", Catania (Italy)
- 21 - 25 May 2012 Member of Organizing Committee of workshop "Drell-Yan Scattering and the Structure of Hadrons", ECT* - Trento (Italy)
- 5 - 7 Sept. 2011 Member of Organizing Committee of miniworkshop "Dihadron Fragmentation Functions (DiFF)", Pavia (Italy)
- 14 - 18 Jun. 2004 Member of Organizing Committee of workshop "Transversity: New Developments in Nucleon Spin Structure", ECT* - Trento (Italy)

GRANTS

- 15 Jul. 2015 - 31 Dec. 2020 Total funding: 315 KEuro. National Coordinator of INFN theoretical project 3DSPIN (CSN4), connected to the ERC Consolidator project *3DSPIN - 3-Dimensional Maps of the Spinning Nucleon* funded by EU Community under the Horizon 2020 programme, contract n. 647981
- 1 Jan. 2017 - present Average funding: 13.4 KEuro / year. Local coordinator for the Pavia unit of the INFN theoretical project NINPHA (National Initiative in Physics of HAdrons)
- 1 Jan. 2014 - 31 Dec. 2016. Total funding: 99.5 KEuro, average funding: 33 KEuro / year. National coordinator for the Pavia unit of the INFN theoretical project NINPHA (rated top-score project of CSN4 in 2013 and 2016 evaluation processes)
- 1 Oct. 2014 - 30 Sept. 2016. Total funding: 80 KEuro, average funding: 40 KEuro / year. Supervisor of dr. X. Xiong, INFN theoretical post-doctoral position (CSN4) associated to NINPHA - Pavia unit
- 1 Jan. 2008 - 31 Dec. 2013. Total funding: 254 KEuro, average funding: 42.3 KEuro / year. National coordinator for the Pavia unit of the INFN theoretical project AD31 "Structure of hadrons and of cold hadronic matter" (CSN4)
- 1 Jan. 2009 - 30 Jun. 2011. Total funding: 15 KEuro. Local Coordinator for Network *TMD-Net - Mapping out the Transverse Structure of the Nucleon* in Work Package 3 of project *HadronPhysics2: Study of Strongly Interacting Matter* (www.hadronphysics2.eu/) funded by EU Community under the FP7 programme, contract n. 227431

- 23 Nov. 2009 - 22 Nov. 2011. Total funding: 48 KEuro. Supervisor of dr. A. Courtoy, INFN theoretical post-doctoral position (CSN4) associated to AD31.
- 1 Jan. 2004 - 31 Dec. 2008. Total funding: 10 KEuro. Local Coordinator for Network N7 *Transversity: exploring the unknown transverse spin structure of the Nucleon* of project *Integrated Infrastructure Initiative in Hadronic Physics* (I3HP, www.infn.it/eu/i3hp/) funded by EU Community under the FP6 programme, contract n. RII3-CT-2004-506078

HONORS AND AWARDS

- 2013 - 2019 Under my responsibility of National Coordinator, the INFN theoretical project NINPHA (National INItiative in Physics of HAdrons) has been evaluated twice in 2013 (as new project) and in 2016 by external referees, obtaining the top score in all five items: 1) quality and relevance of proposed research, 2) adequacy of goals, 3) impact of project, 4) reputation of research team, 5) global evaluation. As such, NINPHA has been included in the list of top theoretical projects of INFN - CSN4 for the time 2013-2019.
- 2016 "Excellence in Reviewing" certificate from Editor of Physics Letter B, Elsevier, Amsterdam (The Netherlands)
- 2012 - 2022 Habilitation to Full Professor in Theoretical Physics of Fundamental Interactions (settore 02/A2; Decreto Direttoriale n. 222 20 July 2012)

TEACHING AND TUTORING

- 2023 - present co-Supervisor of L. Polano, Ph.D. student of XXXIX class, Ph.D. School in Physics, University of Pavia
- 2021 - present Contract Professor of "Fisica Nucleare", Master Degree in Physics, University of Pavia
- 20 - 24 Sept. 2021 Lecturer at LXI "Cracow School of Theoretical Physics", Zakopane (Poland), online
- 2020 - 2023 co-Supervisor of M. Cerutti, Ph.D. student of XXXVI class, Ph.D. School in Physics, University of Pavia
- a.a. 2019 - 20 Advisor of A. Sorano, Bachelor Degree in Physics, University of Pavia, Diploma thesis "Simmetrie nello spettro e nei decadimenti dei mesoni"

- a.a. 2019 - 20 Advisor of M. Cerutti, Master Degree in Physics, University of Pavia, Diploma thesis “Universality of fragmentation functions in non collinear hadronization processes”
- a.a. 2017 - 18 Advisor of M. Cerutti, Bachelor Degree in Physics, University of Pavia, Diploma thesis “Spettroscopia degli adroni e proprietà di simmetria dell’interazione forte”
- 17 Oct. 2016 co-Supervisor of A. Signori, Ph.D. student at Vrije Universiteit Amsterdam, Ph.D. thesis “Flavor and evolution effects in TMD phenomenology - Manifestation of hadron structure in high-energy scattering processes”, Supervisor prof. P.J.G. Mulders
- a.a. 2015 - 16 co-Advisor of C. Bissolotti, Master Degree in Physics, University of Pavia, Diploma thesis “Phenomenology of Transverse Momentum Dependent Parton Distribution Functions in Fourier-conjugate Space”, Advisor prof. A. Bacchetta
- a.a. 2014 - 15 co-Advisor of A.M. Ricci, Master Degree in Physics, University of Pavia, Diploma thesis ‘Predictions for the transverse spin asymmetry in $p^\uparrow p \rightarrow \pi^+ \pi^- X$ collisions”, Advisor prof. A. Bacchetta
- 2014 - present Coordinator of Ph.D. course “Strong Interactions”, Ph.D. School of Physics, University of Pavia
- 2012 - 2021 Contract Professor of “Fisica Nucleare II”, Master Degree in Physics, University of Pavia
- 2011 - 2014 Coordinator of Ph.D. course “Hadronic Physics”, Ph.D. School of Physics, University of Pavia
- a.a. 2011 - 12 co-Advisor of A. Signori, Master Degree in Physics, University of Pavia, Diploma thesis “Studio della dipendenza dal sapore della distribuzione di momento trasverso non polarizzata”, Advisor prof. A. Bacchetta
- 24 - 28 May 2010 Series of lectures “Phenomenology of TMD’s” at Ph.D. School in Physics “Niccolò Cabeo”, University of Ferrara
- 2004 - 2012 Contract Professor of “Fisica Adronica”, Master Degree in Physics, University of Pavia
- a.a. 2004 - 05 Advisor of F. Conti, Master Degree in Physics, University of Pavia, Diploma thesis “La funzione di Sivers in un modello a diquark spettatore”
- a.a. 2004 - 05 co-Advisor of M. Pincetti, Master Degree in Physics, University of Pavia, Diploma thesis “Distribuzione di spin trasverso nel protone”, Advisor prof. S. Boffi

- a.a. 2003 - 04 Lecturer at Ph.D. School in Physics, University of Pavia, "Complementi di Fisica Nucleare I"
- a.a. 1997 - 98 co-Advisor of C. Barbieri, Master Degree in Physics, University of Pavia, Diploma thesis "Correlazione a lungo e corto raggio nella matrice densità nucleare", Advisor prof. S. Boffi
- a.a. 1997 - 98 co-Advisor of C. Fornarola, Master Degree in Physics, University of Pavia, Diploma thesis "La transizione nucleone-delta in un modello chirale semirelativistico a quark costituenti", Advisor prof. S. Boffi
- 1993 - 1995 Contract Professor of "Introduzione alla teoria delle equazioni differenziali e al calcolo matriciale per i problemi di Fisica Teorica", Master Degree in Physics, University of Pavia
- 1990 - 1994 Lecturer for Ph.D. courses "Fisica dei Nuclei I" and "Fisica dei Nuclei II", Ph.D. School in Physics, University of Pavia
- 1990 - 1994 Seminars "Fisica Nucleare con sonde elettromagnetiche ad energie intermedie" at Corso di Perfezionamento in Fisica, University of Pavia
- a.a. 1989 - 90 co-Advisor of E. Ziliani, Master Degree in Physics, University of Pavia, Diploma thesis "Correlazioni a piccole distanze e densità spettrale di nucleone", Advisor prof. S. Boffi

OUTREACH ACTIVITIES

- 09 May 2024 At Salone Libro 2024, co-organization of national award ceremony of "Premio Asimov - IX edition 2023-24", Torino (Italy)
- 03 May 2024 Organization of Award online ceremony for "Premio Asimov Lombardia - IX edition 2023-24" (<https://www.youtube.com/c/PremioAsimov>), approximate 50 participants plus 500 visualizations
- 23 Jan. 2024 Organization of meeting of students from "Liceo Copernico - Pavia" and "I.T.I.S. Cardano - Pavia" with G. Covone, author of one of 5 selected books of Premio Asimov - IX edition 2023-24
- 29 Sept. 2023 In the context of the "Sharper Night - 2023" programme, organization of stand "Premio Asimov" for the event "Scienza in Castello", Castello Visconteo - Pavia (Italy), around 3000 visitors
- 20 - 21 July 2023 co-Organization of "Premio Asimov - Evento Nazionale", INFN LNL Legnaro (Padova, Italy)

- 05 May 2023 Organization of Award online ceremony for "Premio Asimov Lombardia - VIII edition 2022-23" (<https://www.youtube.com/c/PremioAsimov>), approximate 80 participants plus 400 visualizations
- 23 Sept. 2022 In the context of the "Sharper Night - 2022" programme, organization of stand "Premio Asimov" for the event "Scienza in Castello", Castello Visconteo - Pavia (Italy)
- 06 May 2022 Organization of Award online ceremony for "Premio Asimov Lombardia - VII edition 2021-22" (<https://www.youtube.com/c/PremioAsimov>), approximate 120 participants plus 500 visualizations
- 2019 - present Member of National Scientific Board of "Premio Asimov" to promote scientific divulgative literature at high-school students; co-coordinator of Regional Scientific Board of "Premio Asimov" for Lombardia; local coordinator of Pavia unit of INFN outreach project ASIMOV_C3M (CC3M)
- 15 Oct. 2021 At Salone Libro 2021, organization of public event to present the five books selected for "Premio Asimov - VII edition 2021-22", Torino (Italy)
- 24 Sept. 2021 In the context of the "Sharper Night - 2021" programme, organization of stand "Premio Asimov" for the event "Scienza in Castello", Castello Visconteo - Pavia (Italy)
- 22 May 2021 Organization of Award online ceremony for "Premio Asimov Lombardia - VI edition 2020-21" (<https://www.youtube.com/c/PremioAsimov>), approximate 600 participants
- 9 May 2020 Organization of Award online ceremony for "Premio Asimov Lombardia - V edition 2019-20" (<https://www.youtube.com/c/PremioAsimov>), approximate 130 participants
- 25 Oct. 2016 In the context of series of divulgative seminars "Incontri del Martedì", seminar "Fisica Adronica, la Fisica più 'forte' che c'è", Pavia (Italy), approximate 150 Physics students attending
- 23 Sept. 2015 In the context of "Settimana della Scienza" funded by EU Community under the H2020-MSCA-NIGHT-2014-2015 "DREAM" programme, contract n. 633230, in the event "Notte Europea dei Ricercatori 2015 - FameLab", public seminar "Quark e gluoni: particelle di un dio minore??", Pavia, approximate 200 participants
- 18 Jun. 2015 In the context of Summer Stage at Dept. Physics - University of Pavia of high-school students, seminar "Quark e gluoni: particelle di un dio minore??", Pavia, approximate 50 participants

- 22 - 27 Sept. 2014 In the context of "Settimana della Scienza" funded by EU Community under the H2020-MSCA-NIGHT-2014-2015 "DREAM" programme, contract n. 633230, organization of stand "Notte Europea dei Ricercatori 2014", Pavia
- 27 Sept. 2013 In the context of the event "Notte dei Ricercatori: Meet me Tonight - Faccia a faccia con la ricerca", organization of colloquium "Il mestiere del Fisico", Pavia (Italy)