CURRICULUM VITAE DI ANGELO RIVETTI

Generalità

- Nome: Angelo
- Cognome: Rivetti
- Email: rivetti@to.infn.it

Posizione attuale

- Dirigente Tecnologo presso la Sezione di Torino dell'Istituto Nazionale di Fisica Nucleare (da dicembre 2015).

Posizioni precedentemente ricoperte

- Primo tecnologo presso la Sezione di Torino dell'Istituto Nazionale di Fisica Nucleare (dal 2009).
- Tecnologo presso presso la Sezione di Torino dell'Istituto Nazionale di Fisica Nucleare (dal 2001).
- Post-doc presso il Dipartimento di Fisica Sperimentale dell'Università di Torino (2000 - 2001).

Curriculum sudiorum

- 2000 - Dottorato in Ingegneria Elettronica e delle Comunicazioni presso il Politecnico di Torino (dal 1998 al 2000 doctoral fellow presso il gruppo di microelettronica del CERN).
- 1995 - Laurea in fisica presso l'Università degli studi di Torino (votazione 110/110 e Lode)
- 1989 - Diploma di maturità classica presso il Liceo-Ginnasio "General Govone" di Alba (votazione 60/60)

Attività scientifica

Angelo Rivetti è un fisico sperimentale che si occupa principalmente di strumentazione innovativa per la fisica nucleare e delle particelle. Attivo da quasi trent'anni nel campo della progettazione di circuiti integrati per la lettura di rivelatori di particelle cariche e fotoni, è stato uno dei fondatori del gruppo di microelettronica della Sezione INFN di Torino, che ha oggi numerose collaborazioni con istituzioni nazionali ed internazionali, quali Il CERN, BNL, PSI, ETH, IHEP, IN2P3, ed altri. Angelo Rivetti è attualmente membro delle collaborazioni scientifiche internazionali ALICE, BESIII Darkside, DUNE ed AIDAInnova. Sono di seguito sinteticamente riassunti i principali contributi scientifici e tecnologici.

- Dal 2020: convener per il sistema del Tempo di Volo (ToF) nell'ambito del progetto ALICE3. In questo quadro, ha promosso lo sviluppo di innovativi sensori CMOS con guadagno per misure con elevata risoluzione temporale.
- Dal 2021: Coordinatore del WorkPackage di microelettronica nell'ambito del progetto europeo AIDAInnova.
- Dal 2015: membro della collaborazione BESIII - Sviluppo di elettronica di front-end per il rivelatore CGEM, ora installato nell'esperimento.
- Dal 2017: membro della collaborazione Darkside - Sviluppo di elettronica integrata innovativa operante in condizioni criogeniche.
- 2019 - 2022: membro della collaborazione ARCADIA - Sviluppo di sensori innovativi CMOS per la rivelazione di particelle cariche e raggi X in tecnologia CMOS 110 nm.
- 2015 - 2018: responsabile nazionale della collaborazione SEED - La collaborazione ha sviluppato una nuova tecnologia brevettata per l'implementazione di sensori CMOS innovativi "fully depleted".
- 2014 - 2018: responsabile di un progetto di trasferimento tecnologico INFN in ambito microelettronico. Il progetto, interamente finanziato da fondi privati per un importo di 2.3 Meuro, ha sviluppato rivelatori a pixel innovativi con risoluzione temporale migliore di 50 ps.
- 2010 - 2013: responsabile nazionale del progetto INFN LePix: sviluppo di sensori CMOS su substrati ad alta resistività.
- 2010 - 2012: convener per l'upgrade del sistema di tracciamento interno dell'esperimento ALICE tramite l'utilizzo di sensori monolitici.
- 2008 - 2010: R&D di rivelatori a pixel ibridi di nuova generazione per applicazioni di tracciamento a bassa potenza (esperimento PANDA) e ad elevata risoluzione temporale (NA62).
- 2006 - 2008: Sviluppo dell'elettronica di front-end per il RICH dell'esperimento COMPASS al CERN.
- 2004 - 2008: Partecipazione all'installazione e commissioning del sistema di tracciamento al silicio dell'esperimento ALICE al CERN.
- 2001 - 2004: Progetto dell'elettronica integrata di front-end per i rivelatori a deriva al Silicio dell'esperimento ALICE al CERN.

Angelo Rivetti è autore o co-autore di oltre 700 pubblicazioni su riviste internazionali (h-index 69) ed autore del testo "CMOS Front-End for Radiation Sensors" pubblicato da Francys&Taylor. Svolge il ruolo di revisore per le riviste internazionali "Journal of Instrumentation (JINST), "Nuclear Instruments and Methods in Physics Research A, IEEE Transactions on Nuclear Science.
Fa parte dei comitati scientifici internazionali delle conferenze "Topical Workshop on Electronics for Particle Physics (TWEPP) e "International Front-End Electronics Workshop".

Principali ruoli nell'INFN

Dal 01/05/2016 al 30/04/2024 Angelo Rivetti ha ricoperto per due mandati consecutivi il ruolo di Direttore della Sezione di Torino dell'Istituto Nazionale di Fisica Nucleare ed è stato membro del Consiglio Direttivo dell'INFN.

Attività didattica

- Dal 2023: membro del collegio dei docenti del Dottorato Nazionale in Tecnologie per la Ricerca Fondamentale in Fisica e Astrofisica con sede amministrativa presso l'Università di Padova e coordinatore del Curriculum in Elettronica.

- Dal 2010: Professore di microelettronica presso il Dipartimento di Fisica dell'Università degli Studi di Torino.

- Dal 2015: membro del Collegio dei docenti del Dottorato in Ingegneria Elettrica, Elettronica e delle Comunicazioni con Curriculum in Dispositivi Elettronici in convenzione con l'INFN.

- Dal 2015: docente del corso di terzo livello "Microelectronics for Radiation Sensors" presso il Politecnico di Torino.

- Supervisore di 18 tesi di Dottorato in Fisica ed Ingegneria Elettronica.

Angelo Rivetti

europass Curriculum vitae

PERSONAL INFORMATION

Gabriella Gaudio

gabriella.gaudio@pv.infn.it

Gender Female | Nationality Italian

WORK EXPERIENCE

Contracts

1/2020 - present	Senior Research Physicist (permanent position) - INFN Pavia Unit
2/2011 - 12/2019	Research Physicist (permanent position) - INFN Pavia Unit
4/2008 - 1/2011	Fixed Term Researcher - INFN Pavia Unit
7/2007 - 4/2008	Research Associate - University of Washington
7/2003 - 7/2007	Post Doc Position -INFN Pavia Unit
2/2000 - 3/2003	Ph. D., Università di Pavia and University of Washington, Seattle (WA)

Scientific and institutional positions

8/2024- present	DRD6 Technical Board Chair
1/2024- present	INFN representative in PECFA
10/2022-8/2024	DRD6 proposal team and track convener for DRD6-WP3
1/2022-present	Team Leader and WP1 coordinator for the HiDRa project (High Resolution Highly Granular Dual-Readout Demonstrator), grant in INFN CSN5
11/2021-present	ATLAS Muon Online Data Quality Coordinator
7/2021-7/2023	ATLAS Italia Outreach Coordinator
3/2016-2/2020	Team Leader ATLAS Pavia
9/2016 - 10/2018	Member of the Coordination Group for Micromegas Project of New Small Wheel (NSW) upgrade for ATLAS
9/2014 - 3/2015	Maternity Leave
3/2010 - 3/2014	MDT national contact for ATLAS Italia
12/2009 - 12/2012	Technical Coordinator and GLIMOS (Group Leader In Matters Of Safety) for DREAM/RD52 R&D project Test Beam at CERN
2006	Responsible for MDT-BI installation chamber in the ATLAS experiment.

HONORS AND AWARDS

NIMA Young Scientist Award for the best poster presentation

"New results from the DREAM project"

12th Vienna Conference on Instrumentation, 15-20 febbraio 2010

PROFESSIONAL ACTIVITIES

Research Activities

2019-present	Refurbishing of MDT BIL electronics for ATLAS at HL-LHC
2013-present	Micromegas (MM) Chamber for NSW upgrade: Development of mechanical prototype; Member of layout working group; Development of assembly system; MM SM1 readout panel production; QAQC working group for both chambers and assembled modules;
2008-2014	Physics Analysis: W and Z production cross section; Physic validation for SM prediction; Search for stop particles in SUSY models
2006-present	Dual Readout Calorimetry : Several test beam campaign; Test beam technical coordinator; Dual readout in crystal calorimeters; Development of lead/fibres calorimeters; Development of metal capillary and fibres calorimeter

2005-present	Online Data Quality for MDT and MM chambers; Coordination of Muon Data Quality
1998-2014	MDT chambers for ATLAS experiment: Development of QAQC system for single drift tube; Development of assembly system; MDT production, equipment and commissioning; Commissioning at CERN; MDT chamber installation

Scientific production

Several talks and posters at national and international schools and conferences

Publications: https://inspirehep.net/authors/1067049

Committees of international and national conferences

17-24/07/2024	Convener of parallel session on “Detectors for Future Facilities, R&D, Novel Techniques" at ICHEP 2024 conference, Prague
25-27/10/2017	Member of the Local Organising Committee: XIII workshop ATLAS Italia Fisica e Upgrade, Pavia
4-6/6/2012	Convener of "Operating calorimeter" session at 15th International Conference on Calorimetry in High Energy Physics (CALOR12), Santa Fe
26-30/5/2008	Local Organising Committee and Proceeding co-editor at 13th International Conference on Calorimetry in High Energy Physics (CALOR08), Pavia

Outreach activities

Tutor for “Alternanza Scuola-Lavoro" project for High-School students

Organization of European Researcher Night and International Masterclasses

Outreach seminars

Mentoring

Supervisor for several Master and PhD Thesis both for ATLAS and Dual Readout Calorimetry

Lectures in Particle Detectors courses

Supervisor for author qualification activities in the ATLAS experiment

Curriculum of Adriana Nannini

Education

[1992] PhD degree presenting the dissertation "Electric monopole transitions in even-even vibrational nuclei"

[1989-1991] Doctorate at the Physics Department of the University of Florence

[1987] Master Degree in Physics from the University of Florence.

Professional positions

Since 2005 Senior researcher at INFN.

[1992-2005] Full-time researcher at the National Institute of Nuclear Physics (INFN)

[1988] Fellowship funded by the National Institute of Nuclear Physics

[1987] Physics teacher at the Institute "A. Genovesi" in Florence (High School).

National and international positions of responsibility

Referee for the scientific journals European Physical Journal A, Europhysics Letter, Nuclear Physics A.

[2017-present] Florence representative in the "Commissione Coordinamento Terza Missione (CC3M)" of INFN

[2016-present] Italian representative in the Isolde Collaboration Council (CERN). ISCC manages the financial and human resources of the collaboration (which includes about 600 16 nations physicists)

[2012- present] Member of the Agata (Advanced GAmma Tracking Array) Collaboration Council. The ACC represents all the institutions that collaborate in the AGATA project and acts as a scientific consultant for the AGATA Steering Committee

[2012-2022] Member of the INFN Evaluation Working Group (GLV). GLV deals with internal evaluation (analysis of the scientific performance of CSN3 experiments), but also external (VQR 2011-2014, VQR 2015-2019) and international (preparation of the annual report for the International Evaluation Committee)

[2016-2020] Member of the Network Activity NuSpIn (Nuclear Spectroscopy Instrumentation) in the framework of the ENSAR2 project (HORIZON2020)

[2013-2016] Member of the Steering Committee of the SPES project of INFN

[2007-2012] Member of the working package Instrumentation in the framework of the european project SPIRAL2-PP (FP7)

[2005-2023] Responsible (in charge of research funds) of the Nuclear Spectroscopy group in Florence.

[2006-2012] National coordinator (in charge of research funds) of the Nuclear Physics Group of INFN Firenze unit.

[2001-2004] National coordinator (in charge of research funds) of the MISSIVE experiment.

[2000] National coordinator (in charge of research funds) of the INFN ELCOM-2 experiment.

[1993-1994] Responsible of the INFN RADIO experiment in Florence.

Conference and Workshop committees

[2019] Convener of the "Nuclear Shapes" session at the Workshop "AGATA@LNL for stable beams", Laboratori Nazionali di Legnaro 25-26 March 2019

[2016-2018] Member of the organising committee of the international conference "European Physics Conference 2018" Bologna, 2-9 September 2018

[2017-2018] Member of the scientific advisory committee of the international conference "Modern Aspects in Nuclear Structure" Bormio 19-25 February 2018

[2011-2013] Member of the organising committee of the "International Nuclear Physics Conference 2013", Firenze, 2-7 July 2013. Editor of the proceedings on the European Physics Journal Web of Conference

[2012] Member of the organising committee of the "SPES One-day Workshop: Coulomb Excitation with RIBs", Firenze, 26-27 September

[2009] Member of the organising committee of the "EURISOL DS Town Meeting", Pisa, 30/03-1/04

[1994] Member of the organising committee of the national workshop "Experimental Perspectives with Radioactive Nuclear Beams" at the Laboratori Nazionali di Legnaro, 14-16 November.

Teaching Activity

Since 2012 I am Adjunct Professor at the Master Degree in Physics and Astrophysics, University of Florence.

I have always tutored students in the Master's Degree in Physics, some of whom chose to work with me for their thesis.

[2023] Supervisor of a bachelor thesis at ISOLDE (grant of the Physics Department of the University of Florence)

[2022] External assessor for a PhD thesis "Beta decay studies as a tool to investigate nuclear structure in the n-rich Po-Fr region and in p-rich Cd isotopes", University of Milan.

[2021] External assessor for a PhD thesis "Configuration mixing investigation in germanium isotopes", University of Milan.

[2021-2023] Chair of the permanent Examining Committee for post-doc research grants at the Firenze unit of INFN.

[2018-2021] Co-tutor of the PhD thesis "Electron Spectroscopy with radioactive Beams", University of Camerino.

[2020] Supervisor of the master thesis "Misure di Eccitazione Coulombiana ^{130}Xe", University of Florence.

[2018] Supervisor of the master thesis "Misure di Eccitazione Coulombiana degli stati di bassa energia del nucleo ^{94}Zr", University of Florence.

[2016] Member of the Examining Committee for the admission to the XXXII doctoral research programmes in Physics and Astronomy "XXXII CICLO" of the University of Florence.

[2014-2017] Tutor of the PhD thesis "Coulomb Excitation of low lying states in ^{66}Zn with the SPIDER array", University of Florence.

[2015-2017] Chair of the permanent Examining Committee for post-doc research grants at the Firenze unit of INFN.

[2014] Supervisor of the master thesis "Misure dei fattori giromagnetici dei livelli isomerici nel nucleo ^{174}W", University of Florence.

[2014] Member of the Examining Committee of the "Claudio Villi" prize for the best PhD thesis in nuclear physics defended in 2013.

Scientific Activity

My research activity is focused on the experimental study of the properties of excited states in atomic nuclei, using gamma and particle spectroscopy.

My research is undertaken at national and foreign laboratories (amongst others, ISOLDE (CERN), ILL (Grenoble), TRIUMF (Vancouver), HIL (Warsaw)), both as a member and as the Italian spokesperson of various international collaborations. One of these is the AGATA collaboration, whose goal is to build a "next generation" 4pi gamma-ray spectrometer based on the principle of gamma-ray tracking.

I coordinated many experimental campaigns and the related data analyses. Most of the experiments dedicated to electron spectroscopy and to lifetime measurements of nuclear states were performed under my sole responsibility.

During my career I gained experience on the use of charged particle detectors and I contributed significantly to the development of original detection techniques that turned out to be essential to the experiments' success. For example the design and assembly of the array of segmented silicon detectors for Coulomb Excitation measurements (SPIDER), used at LNL as ancillary detector for AGATA, and the set-up for electron spectroscopy SLICES, to be used at the beta-decay station of SPES and ISOLDE.

Parallel to my experimental activity I carried out phenomenological analyses in the context of the interacting boson model. In this way I was able to highlight for the first time the possibility of interpreting entire bands of excited states in even-even nuclei as composed of mixed symmetry states, i.e. states not totally symmetrical in the proton-neutron exchange.

I am also interested in applied and interdisciplinary physics: I won, together with the medical physics colleagues of the Azienda Ospedaliera Universitaria Careggi, a PRIN finalized at the realization of an apparatus for the identification of $\beta-$ contaminants in radiopharmaceuticals.

Co-author of more than 100 research papers on scientific journals and on proceeding volumes (special volumes of scientific journals).

More than 20 presentations at national and international conferences. Chair of several sessions in international conferences.

Outreach Activity

I have always been involved in outreach activities.

I organized two selections of the scientific talent FameLab (2019, 2020), the stand "Racconti RadioAttivi" for the event “La Notte dei Ricercatori - Bright 2019” and the event for high schools "Pugno di Libri Scientifici" (2022).

My commitment has increased since, as a member of the GLV, I have the responsibility of an in-depth analysis of the Public Engagement activities of the INFN sections. Last year I collaborated in the selection and writing of the outreach case studies for VQR 2015- 2019.