Paolo Giubellino, Experimental Physicist working on High-Energy Nuclear Collisions. Currently leading the ALICE experiment at CERN, international collaboration of over 1000 scientists from over 100 scientific institutions.

Education:
- 1983, Graduated in Physics at Torino University with the grade 110/110 cum laude and special honorable mention (highest grade). 1984/85, Fulbright fellow at the University of California, Santa Cruz.
2000, awarded the title of Doctor in Physics and Mathematics (Habilitation) by the Dubna Academic Council (Russia).

Honours:
- Honorary title of "Profesor Invitado" of the Istituto de Sciencias y Tecnologias dell'Università di La Havana, Cuba (2000).
- Medal of the Division of Particles and Fields of the Mexican Physical Society (2010)
- Honorary title of "distinguished guest" of the city of Puebla, Mexico (2012)
- Honorable Mention of the Ministry of Education, Science, Research and Sport of the Slovak Republic (2013).
- Title of "commendatore" ("commander", second-highest honorific title in the Republic) for scientific merits from Italian President Napolitano (2012).
- "Enrico Fermi" Prize, the highest recognition of the Italian Physical Society (2013).
- "Lise Meitner" Prize, the highest recognition of the European Physical Society for Nuclear Physics (2014)

Science Management and Review Committees:
- Chair, 2003-2011, of the scrutiny group charged of assessing and monitoring the running and maintenance expenses for the CDF International Finance Committee at Fermilab, USA.
- Member, 2003 -2010, of the Conseil Scientifique of the SUBATECH Laboratory, Nantes, France.
- Member in 2006 of the 4-yearly CNRS/IN2P3 Evaluation Committee of the SUBATECH Laboratory, Nantes, France.
- For the Agence d'Evaluation de la Recherche (AERES) of the French Government: member in 2008 of the Evaluation Committee of the IPN Laboratory in Orsay, Member in 2008 of the Evaluation Committee of the LPSC Laboratory in Grenoble, President in 2010 of the Evaluation Committee of the Subatech Laboratory in Nantes.
- Member since 2010 of the Scientific Council of the IN2P3 (National Institute of Nuclear and Particle Physics) of France.
- Member since 2013 of the Comisión de Infraestructuras de Fisica de Particulas y Aceleradores del Ministerio de Economia y Competitividad, Spain
- For the GSI Laboratory in Germany (largest German Nuclear Physics Laboratory): Member of the General Physics Advisory Committee (G-PAC) April 2007- March 2010, Chair of the G-PAC since March 2010 and as such member of the Laboratory Scientific Council.
- Member from Jan 2008 to Dec 2010 of the SPS and PS experiments Committee (SPSC) at CERN.
- Member since August 2009 of the EMMI Program Advisory Committee of the Extreme Matter Institute (EMMI), Darmstadt, Germany
- Served as referee for the selection and evaluation of projects for, among others, INTAS, Several European Programs, the Italian Ministry of Education and Research, The Russian Ministry of Education, the Government of the Czech Republic, the National Research Foundation of the Republic of South Korea and the National Research Foundation of South Africa.
- Member of the "Phases of Nuclear Matter" working group for the 2004 NUPECC (Nuclear Physics European Collaboration Committee) Long Range Plan.
- Convener of the "Phases of nuclear matter" working group for the 2010 NUPECC Long Range Plan.
- Member since August 2000 of the Instrumentation Panel of the ICFA, and therefore member of the International Advisory Committee of the ICFA instrumentation schools.
- Chair of the Scientific Advisory Committee of the HELEN project (2005/2009), the largest among the ALFA programs of scientific cooperation between Europe and Latin America.
- Coordinator Work package 1 of the EPLANET project of scientific cooperation between Europe and Latin America (about 4 M euros, four-year EU program), member of the Scientific Advisory Committee of EPLANET.
- Member of the International Advisory Committee of numerous International Conferences, including ICHEP, the international Conference on High Energy Physics, and all major conferences in High-Energy Nuclear Physics (Quark Matter, Hard Probes, Strange Quark Matter, ICPAQGP).
- Served as referee for several major international Physics Journals, among which Physical Review Letters, Physical Review, Nuclear Physics, Physics Letters and Nuclear Instruments and Methods.

Career:
- Since July 1st, 1985 permanent position as research scientist at the Torino branch of the Italian National Institute for Nuclear Physics (INFN). Promoted in 1996 to "primo ricercatore". Since Jan. 2006, promoted to "research director", the highest in the three-level INFN career. Responsible for several scientific programs within INFN, and for NATO, INTAS and EU grants. From 1990 to 1996, coordinator of the Group II of the Torino branch of INFN (Group II is one of the five sections in which INFN research is organized; in Torino it included about 30 researchers at the time). Responsible from 1995 to 2000 and since 2007 for the Torino group involved in the ALICE ITS (18 researchers).
- Responsible, in NA34/1 collaboration, for the design, construction and operation of SCI-PAD detector. Responsible, in NA34/2, for the Ring Counters, silicon pad detectors. Responsible in NA50 for the design, construction and commissioning of the silicon multiplicity detectors (MD).
Participated in several R&D projects directed to the development of silicon detectors and radiation tolerant electronics. Created the microelectronics group at INFN Torino.

- Project leader /deputy project leader since 1992 of the ALICE Inner Tracking System, project involving 25 research institutions from 12 different countries. Served in the general management of the ALICE experiment since the early nineties to now, as member of the Technical and Management Board and, since 2002, as member of the Physics Board. Member of the editorial board of the ALICE Physics Performance Report. Deputy spokesperson of the ALICE collaboration from July 2000 to September 2002, and again since August 2004 to end 2010.
- In charge of the ALICE Upgrades, 2009-2010, and of the Conference Committee, 2009-2010. Elected in March 2010, with a very large majority of the 110 participating scientific institution of 33 different countries, to the position of Spokesperson of the ALICE experiment for three years. In charge as Spokesperson since Jan 2011. Led the ALICE Collaboration to the preparation of an Upgrade proposal for experiment, spanning the years 2018 to 2025 and worth approximately 50 M Euros. The upgrade project, which will involve 138 Institutions from 37 countries, has been approved in September 2012. On July 17, 2013, elected with a very large majority for a second term as spokesperson of the Collaboration.

Talks and Publications:
- Delivered over 40 talks at international conferences and many invited seminars and colloquia about the results of my scientific work, including the closing plenary talk at the 2002 Quark Matter Conference, and chaired sessions in numerous international conferences.
- Published over 200 scientific papers, with over 40 citations each on average (h-index of 54 on INSPIRE, 41 on ISI Web of Knowledge).

Teaching:
-Taught short courses at various international schools, among which the instrumentation schools of the ICFA and the International school "Enrico Fermi". Taught short courses for PhD and Master students at Torino University.
Supervisor of 24 thesis projects at Torino University and 2 at the Politecnico di Torino.
Rapporteur of a Ph.D. thesis at the Université de Nantes, France, of a Ph.D. thesis at the Université de Strasbourg, France, a Ph.D. thesis at CEADEN, Cuba, a Ph.D. thesis at Cinvestav, Mexico and a PhD thesis at University of Jyväskylä, Finland.
Supervisor of a PhD thesis at Kiev University.

February 2014

Luigi (Gigi) Rolandi
Senior Research Physicist
CERN
Geneva, Switzerland

Born in Naples, Italy
12 February 1953

Academic Positions

Professor (contratto)	Scuola Normale Superiore	2008-present
Senior Research Physicist	CERN	1991–present
Associate Professor	University of Trieste, Italy	1985–1994
Assistant Professor	University of Trieste, Italy	1978–1985

Education

Perfezionamento (PhD)	Scuola Normale Superiore, Pisa, Italy	1975–1978
Laurea (Master)	Università di Pisa & SNS, Pisa, Italy	1970–1975

HEP Experiments

CMS (Tracker Project Manager , Chair Pub. Comm, Phys Coor.)	1998-present
ALEPH (Physics Coordinator 89-94, Spokesperson 94-97)	1982-2000
NA1-NA7	1975-1984

Editorial Boards

Scientific Adviser for Experimental Physics of JHEP	2009-present
Editor of The Journal of High Energy Physics (JHEP)	1998–present
Editor of Physics Letters B (PLB)	2001–present

HEP Committees and Panels

Laboratori Nazionali di Frascati	
Chair of International Advisory Committee	2011–present
EUDET (Detector R&D towards the International Linear Collider)	
Chair of International Advisory Committee	2005–2009
DESY Physics Research Committee	
Chair	2001–2004
Member	1998–2001
European Committee for Future Accelerators (ECFA)	
Member of ECFA and Restricted ECFA	2002–2004
Evaluation Committee of the Norwegian Research Council	
Member	2000–2000
UK Particle Physics Experiments Selection Panel	
Member	1998–2000
LHC Experiments Committee at CERN	
Member and principal referee of the ALICE experiment	1996–2000
SLAC Experimental Program Advisory Committee	
Member	1993–1997
LEP Experiments Committee at CERN	
Member, representing the ALEPH Collaboration	1988–1994
INFN Commissione Scientifica Nazionale 1	
Scientific Secretary	1987–1991
Member	1985–1987

CERN Committees and Panels

Scientific Information Policy Board (SIPB) Chair	2006–present
Senior Staff Advisory Committee to the Director General (The NINE)	
Member and Chair	1997–2000

February 2014

Biographical information
Gigi Rolandi

Gigi Rolandi is a member of the Compact Muon Solenoid (CMS) Collaboration and a Senior Research Physicist at the European Laboratory for Particle Physics (CERN), where he has conducted research since 1975. Since 2008 he is teaches Experimental High Energy Physics at Scuola Normale Superiore in Pisa.

Dr. Rolandi studied physics and experimental high energy physics at the exclusive Scuola Normale Superiore in Pisa, Italy. Under his thesis advisor, Lorenzo Foà, he participated in the R&D, construction and commissioning of the drift chambers and the Cherenkov detectors of the NA1 experiment, installed in the H4 beam line of the CERN SPS, and later in the analyses for the determination of charmed hadrons lifetimes, using for the first time an active silicon target.

At the age of 25, Dr. Rolandi was offered an assistant professorship at the University of Trieste and started a new HEP group that participated in the NA1 and NA7 Collaborations. In the NA7 experiment, he contributed to the design and analysis of the measurement of the pion electromagnetic form-factor at threshold in the time-like region. This experiment was based on producing pion pairs with a positron beam on a hydrogen target; it is, to date, the most precise measurement of the pion form factor in that energy range.

In the early 80's CERN was expected to build an electron–positron collider energetic enough to produce the as yet undiscovered Z boson. Dr. Rolandi contributed to the international effort to design a sophisticated and effective apparatus (ALEPH) for the precision study of the properties of the electroweak interaction. The ALEPH Collaboration had chosen, for the central tracker, the new TPC technology, even though the only previous attempt – the PEP4 TPC – was experiencing great difficulties because of drift distortions. Gigi Rolandi, together with Francesco Ragusa, studied the resolution error associated with the drift of the ionization electrons in the electric and magnetic fields, as well as the error associated with the production of the signals on the pads of the wire-chamber planes. The most significant result of this study was the understanding of the importance of the magnetic field as stabilizer of the ionization electrons' drift paths. This and other studies on the ALEPH TPC are collected in *Particle Detection with Drift Chambers,* written by Gigi Rolandi together with Walter Blum, a book which became a reference for builders of gas-based particle detectors.

In 1989, with the LEP start-up drawing near, Gigi Rolandi was asked by Jack Steinberger, ALEPH spokesperson and founder, to steer and stimulate the evolution of the Collaboration from a "subdetectors' community" to a running experiment. The traditional "Gigi" Tuesday meetings that he started in 1989 and chaired for five years marked the ALEPH Collaboration: they were the forum where the readiness and the experimental programme and later all conference contributions and papers, were discussed and approved.

Precision electroweak physics was the most intense physics topic in the early 90's. Dr. Rolandi made central contributions to the ALEPH analyses on the measurements of the Z boson properties and the determination of the number of neutrino families. From 1992 to 1994 Rolandi chaired the LEP Energy Calibration Working Group, which provided the first precise energy calibration of LEP, allowing a measurement of the Z boson mass with a precision of 1.4 MeV.

February 2014

In 1994 Dr. Rolandi was elected spokesperson of the ALEPH Collaboration. In this role, he managed the transition to the high-energy period of LEP, starting with 130 and 136 GeV runs in November 1995. ALEPH was a very successful experiment, which produced more than 250 high-quality papers. Dr. Rolandi made major contributions to this scientific production directly and in his capacity as a member of the ALEPH editorial board, from 1991 to the present, and as its chairperson from 1997 to 2000.

In 1997 – at the end of his term as ALEPH spokesperson – Rolandi declined the offer to stand for a second term and joined the CMS Collaboration, which was constructing a large and challenging detector for experimentation at the new high-energy frontier: the CERN Large Hadron Collider.

In 1998 Dr. Rolandi joined the CMS Tracker Project. He reorganized its managerial structure by introducing the Tracker Steering Committee as the top decision-making body. In 1999 he played a major role in the decision to change the baseline design into an "all-silicon" tracker. In 2000 Rolandi became Project Manager and restructured the CMS Tracker project in order to face the task of building a detector with an unprecedented number of silicon sensors in five years. In the following years, the facilities for building and testing 16,000 silicon modules were put in place at more than 20 sites world-wide.

Since 2005 Dr. Rolandi has engaged in the preparation of Physics analyses in CMS. He designed the approval process for physics analyses that was subsequently adopted by the Collaboration. He designed the management tools to steer the many analyses that are active in CMS at the same time and the Collaboration Wide Review of CMS papers.

From 2006 to 2009 he was the Chair of the CMS Publication Committee and chair of many Analyses Review Committee. As CMS Editor he was responsible for the publication of all scientific notes and papers of the Collaboration and published the 23 papers on the CMS detector performance with Cosmic Rays, the first large set of papers produced by the CMS collaboration as a whole.

From January 2010 to December 2011 he was the Physics Coordinator of the CMS experiment, He added the Physics Office to the managerial structure of the project. He proposed the Physics Plan adopted for the 2010 run that is producing a large number of high quality papers. Among others analyses he coordinated the CMS analyses that gave the first indication of the Higgs boson.

Dr. Rolandi is member of the Editorial Board of two of the most prestigious journals of HEP: Physics Letters B and The Journal of High Energy Physics. Since 2009 he is the Scientific Adviser to the Director of JHEP for Experimental Physics.

Dr. Rolandi served as member of numerous HEP Committees including LEPC at CERN, EPAC at SLAC, LHCC at CERN, PPESP in the UK, and RECFA. From 2001 to 2004, Dr. Rolandi was the chairperson of the DESY Physics Research Committee. Since 2011 he is the chairperson of the Research Committee of the Laboratori Nazionali di Frascati. Dr. Rolandi was member of the advisory or review committees of many high energy institutes including LIP in Portugal and HEPHY in Austria.

Since 2007 Dr. Rolandi teaches Experimental Particle Physics at Scuola Normale Superiore in Pisa.

Dr. Rolandi is author of more than 600 publications on refereed journals; the list is available http://goo.gl/FQCrJr

Curriculum vitæ

Nome:	**Laura Covi**
Nationalità:	Italiana
Data di nascita:	4 Giugno 1969
Luogo di nascita:	Bolzano (Italia)
Professione:	Professore Ordinario (W3)
Indirizzo:	Institut für theoretische Physik Friedrich-Hund-Platz 1 D-37077 Göttingen Germania

Esperienza professionale

- dal 1 Novembre 2010:
  professore ordinario (W3) presso l'Istituto di Fisica Teorica dell' Università Georgia Augusta di Gottinga
- Ottobre 2005 - Ottobre 2010:
  Staff permanente presso il Gruppo teorico di DESY, Deutsches Elektronen-SYnchrotron, Amburgo, Germania
- Gennaio 2004 - Dicembre 2005:
  Post-doc Fellow nella Divisione teorica, CERN, Ginevra, Svizzera
- Settembre 2001 - Dicembre 2003:
  Junior Staff presso il Gruppo teorico di DESY, Deutsches Elektronen-SYnchrotron, Amburgo, Germania
- Settembre 1999 - Agosto 2001:
  Ricercatrice Post-Doc presso il Gruppo teorico di DESY, Deutsches Elektronen-SYnchrotron, Amburgo, Germania
- Novembre 1997 - Luglio 1999:
  Ricercatrice Post-doc al Dipartimento di Fisica, Università di Lancaster, Lancaster, Gran Bretagna

Istruzione e Formazione

- 20 Ottobre 1997: Dottorato di ricerca (Ph.D) in teoria delle particelle elementari presso la SISSA-ISAS, Trieste, Italia.
  Titolo della tesi: "*CP violation for leptogenesis*",
  relatori: Dr. E. Roulet e Prof. A. Masiero

- Ottobre 1994: ammissione via concorso al programma di Ph.D. in Teoria delle particelle elementari presso la Scuola Internazionale Superiore di Studi Avanzati, SISSA-ISAS, Trieste, Italia

- 22 Luglio 1994: Laurea in fisica, conseguita con votazione *110/110 e lode* presso il Dipartimento di Fisica, Università di Trento.
  Titolo della tesi: "*Developments in QFT at Finite Temperature*",
  relatore: Prof. Ruggero Ferrari

Interessi di ricerca

Teoria delle particelle elementari, cosmologia teorica e astroparticelle: bariogenesi e leptogenesi nell'universo primordiale, modelli inflazionari e fenomenologia di tali modelli, candidati supersimmetrici e non per la Materia Oscura e relativa fenomenologia, modelli di fisica delle particelle oltre il Modello Standard, teorie di grande unificazione e di supergravità.

Pubblicazioni su giornali referati

Autrice di 46 articoli su giornali referati e un articolo di review, la lista completa si può trovare su inspirehep.net sotto il link:

http://inspirehep.net/search?ln=en&ln=en&p=find+a+covi%2C+L

Altri incarichi professionali

- Direttrice dell'Istituto di Fisica Teorica dell'Università Giorgia Augusta di Gottinga
- Presidente del comitato di programma del MIAPP, Munich Institute for Astro- and Particle Physics
- Membro della Società di Fisica tedesca (DPG) e del comitato selezionatore per il premio Hertha Sponer della DPG
- Referee per le riviste: JCAP, JHEP, EPJC, Physics Lett. B, Phys. Rev. D, Phys. Rev. Lett., Physics Reports
- Referee per la Deutsche Forschungsgemeinschaft (DFG), la fondazione Alexander von Humboldt e per varie altre agenzie nazionali di finanziamento alla ricerca

Dieci pubblicazioni più importanti (in ordine cronologico)

- L. Covi, E. Roulet and F. Vissani
  CP violating decays in leptogenesis scenarios
  Phys. Lett. **B384** (1996) 169-174, [arXiv:hep-ph/9605319]

- L. Covi, J. E. Kim and L. Roszkowski
  Axinos as Cold Dark Matter
  Phys. Rev. Lett. 82 (1999) 4180, [arXiv:hep-ph/9905212]

- T. Asaka, W. Buchmüller and L. Covi -
  Gauge Unification In Six Dimensions
  Phys. Lett. **B523** (2001) 199-204, [arXiv:hep-ph/0108021]

- T. Asaka, W. Buchmüller and L. Covi
  Quarks and Leptons between Branes and Bulk
  Phys. Lett. **B563** (2003) 209, [arXiv:hep-ph/0304142]

- A. Brandenburg, L. Covi, K. Hamaguchi, L. Roszkowski and F.D. Steffen
  Signatures of axinos and gravitinos at colliders
  Phys. Lett. **B617** (2005) 99-111, [arXiv:hep-ph/0501287]

- L. Covi, J. Hamann, A. Melchiorri, A. Slosar and I. Sorbera
  Inflation and WMAP three year data: Features are still present
  Phys. Rev. **D74** (2006) 083509, [arXiv:astro-ph/0606452]

- W. Buchmüller, L. Covi, K. Hamaguchi, A. Ibarra and T. Yanagida
  Gravitino dark matter in R-parity breaking vacua
  JHEP **0703** (2007) 037, [arXiv:hep-ph/0702184]

- G. Bertone, W. Buchmüller, L. Covi and A. Ibarra
  Gamma-Rays from Decaying Dark Matter
  JCAP **0711** (2007) 003, [arXiv:0709.2299 [astro-ph]]

- L. Covi, M. Gomez-Reino, C. Gross, J. Louis, G. A. Palma and C. A. Scrucca
  de Sitter vacua in no-scale supergravities and Calabi-Yau string models
  JHEP **0806** (2008) 057 [arXiv:0804.1073 [hep-th]]

- L. Covi, M. Grefe, A. Ibarra and D. Tran
  Unstable Gravitino Dark Matter and Neutrino Flux
  JCAP **0901** (2009) 029 [arXiv:0809.5030 [hep-ph]]

Curriculum vitae
Prof. Dr. Elisa Resconi

Personal data

e-mail	elisa.resconi@tum.de
Address (Office)	Boltzmannstrasse 2
	D-85748 Garching bei München (Germany)
	Tel: +49 89 358327120
Born	1.12.1971 Brescia, Italy
Citizenship	Italian
Web page	http://www.cosmic-particles.ph.tum.de/

Employment

11.2011 – present	Heisenberg Professorship (DFG), TUM, Germany
09.2011 – 11.2011	Associated Scientist, Excellence Cluster, TUM, Germany
05.2011 – 08.2011	Guest Professor, Universität Erlangen-Nürnberg, Germany
2005 – 2011	Emmy-Noether Junior Research Group (DFG)
	Max-Planck-Institut-für-Kernphysik, Heidelberg, Germany
2002 – 2005	Marie Curie Postdoctoral Fellow (EU), DESY-Zeuthen, Germany
	Work on neutrino astronomy with AMANDA and IceCube experiments

Education

1997 – 2001	Ph.D. in Physics, Universitá degli Studi di Genova
	and Laboratori Nazionali del Gran Sasso, L'Aquila
	Solar neutrinos, Borexino experiment
	Supervisors: Prof. G. Manuzio, Prof. R. Raghavan
1996 – 1997	Laboratori Nazionali del Gran Sasso, L'Aquila, Italy
	INFN Fellowship for undergraduate students
1996	M.Sc. in Physics, solar neutrinos, Borexino experiment, Milano, Italy
1989 – 1995	Study of Physics at the University of Milano, Italy

Research responsibilities

- Associated Editor, Europhysics Journal C (EPJC) since 2014
- Member of the Scientific Advisory Committee of KM3NeT since 2013
- Member of the Committee for Astroparticle Physics in Germany, elected representative of the area *High-energy neutrinos*, since 2013
- Co-coordinator of the ASPERA networks, A Concerted R&D Program for Low Energy Neutrino Detectors (LOWE), since 2012

- Head of the research area, *Experimental Physics with Cosmic Particles*, TUM, since 2011
- IceCube Data Analysis Coordinator (2009-2011)
- IceCube Institutional Board representative for MPIK-Heidelberg and now TUM since 2006

Teaching and supervision

- Lecture in "Experimental physics I, II for teachers", "Data analysis tools in particle and astroparticle physics", "Neutrino Astronomy", and Mentoring Program since 2012.
- Supervisor of PhD students since 2006, supervisor of master and bachelor students since 2009
- International School of AstroParticle Physics, APC, Paris, 2012
- Lecture in "Neutrino Astronomy", Universität Erlangen-Nürnberg, 2011
- Lecture at Schule für Astroteilchenphysik Universität Erlangen-Nürnberg, 2009
- Exercises for "Physik IV - Atomic Physics", Universität Heidelberg, 2008
- Special lecture on "Particle Astrophysics", Universität Heidelberg, 2008
- Lectures at the Joint Dutch Belgian German Graduate School, Bad Honnef, 2006
- Lecture at the VIDMAN students meeting, Hamburg, 2005

Referee

- Referee for journal: Astroparticle Physics Journal, European Physical Journal C
- Referee for funding agencies: Agence Nationale de la Recherche, Swiss National Science Foundation, Ministero dell'Istruzione, dell'Universitá e della Ricerca Italiana, Danish Council for Independent Research Natural Sciences, Deutsche Forschungsgemeinschaft (DFG).
- Referee for Alexander von Humboldt-Stiftung

Publications to major international peer-reviewed journals

- Total number of papers: 173 of which 112 in refereed journal
- Total number of citations: 6665 refereed publication
- Average citation per paper: 53.8 refereed publication
- h-index: 46 refereed publication

List of the 10 most important recent papers

1. P. Padovani, E. Resconi, *Are both BL Lacs and pulsar wind nebulae the astrophysical counterparts of IceCube neutrino events?*, MNRAS 2014 443 (2): 474-484.

2. The IceCube and PINGU Collaboration, *Letter of Intent: The Precision IceCube Next Generation Upgrade (PINGU)*, arXiv:1401.2046.
3. The IceCube Collaboration, *Evidence for High-Energy Extraterrestrial Neutrinos at the IceCube Detector*, Science 342 (2013) 6161, 1242856.
4. The IceCube Collaboration, *Searches for high-energy neutrino emission in the Galaxy with the combined IceCube-AMANDA detector*, Astrophys.J, 763, 33 (2013).
5. The IceCube Collaboration, *Measurement of Atmospheric Neutrino Oscillations with IceCube*, Phys.Rev.Lett. 111 (2013) 8, 081801.
6. Y. Sestayo, E. Resconi, *Uncovering neutrinos from cosmic ray factories: the Multi Point Source method*, Astropart.Phys. 44 (2013) 15-23.
7. The IceCube Collaboration (R. Abbasi et al.), *The Design and Performance of IceCube DeepCore*, Astropart.Phys. 35 (2012) 615-624.
8. The IceCube Collaboration (Abbasi, R. et al.), *Time-Dependent Searches for Point Sources of Neutrinos with the 40-String and 22-String Configurations of IceCube*, Astrophys.J. 744 (2012).
9. S. Schönert, T.K. Gaisser, E. Resconi, O. Schulz, *Vetoing atmospheric neutrinos in high energy neutrino telescopes*, PRD 79 (2009) 043009.
10. E. Resconi, D. Franco, A. Gross, L. Costamante, E. Flaccomio *The classification of flaring states of Blazars*, A&A 502 (2009) 499M-P504.

Book of proceedings

E. Resconi, F.A. Aharonian (editors):
Proceedings of the Workshop High-Energy Gamma-rays and Neutrinos from Extra-Galactic Sources, MPIK, Heidelberg. International Journal of Modern Physics D, Vol 18, Nr 10, October 2009.

Granted patents

PCT/EP2005/003200, Owner: DESY, Inventor: E. Resconi; Title of the patent: *Wavelength shifter, method for its production and photomultiplier incorporating a wavelength shifter.* April 2008, Granted from European Patent Office.

Recent invited talks

- Schuster Colloquium, School of Physics and Astronomy, The University of Manchester, November 2014
- Colloquium Cluster of Excellence ,,Universe" (with P. Padovani), Munich, October 2014
- Public Lecture, KIT Campus Sd, Karlsruhe, October 2014
- Public Lecture, Tag der offenen Tür, TUM-Physik Department, Munich, September 2014
- Conference Talk, NOW2014, September 2014
- Conference Talk, Astroparticle Physics Conference 2014, Amsterdam, June 2014
- Colloquium, HADES General Meeting, IAS Garching, February 2014
- Colloquium, Max-Planck-Institut für Plasmaphysik, Garching, February 2014
- Conference Talk, 52. International Winter Meeting on Nuclear Physics, Bormio (Italy), January 2014
- FRII Seminar, FRII Garching, January 2014
- Colloquium, Maier-Leibnitz-Laboratorium der Universität München, December 2013
- Public Lecture, BERLIN.MIND, December 2013
- Colloquium, ESO/MPA/MPE/USM Joint Astronomy Colloquium, November 2013
- Conference Talk, EPS HEP 2013 Stockholm, July 2013
- Conference Talk, 2013 Aspen Winter Workshop–New Directions in Neutrino Physics, January 2013
- Talk, Workshop on Neutrino Mass Hierarchy in Ice and Water, PINGU and ORCA, Catania, December 2012
- Colloquium, Munich Physics Colloquium, July 2012
- Talk, Arbeitstreffen Kernphysik Schleching, February 2012

Invited lectures to international advanced schools

- Lectures at the International School of AstroParticle Physics, "Multi-Messenger Approach in High Energy Astrophysics", July 2012, APC, Paris.
- Lectures at the Invited Lecture, Schule für Astroteilchenphysik Universität Erlangen-Nürnberg, October 2009, Erlangen, Germany.

- Lectures at the Joint Dutch Belgian German Graduate School, Physikzentrum Bad Honnef, September 2006, Bad Honnef, Germany.
- Lecture at the VIDMAN students meeting, Hamburg, December 2005. Hamburg, Germany.

Organization of international conferences and workshops

- Neutrinos in astro- and particle physics, MIAPP 2014, Garching 2014.
- Mediterranean and Antarctica Neutrino Telescope Symposium, MANTS 2013, Garching 2013.
- TAUP 2013 13th International Conference on Topics in Astroparticle and Underground Physics 2013, Co-convener of the session "Atmospheric neutrinos", Asilomar, California USA.
- IceCube Particle Astrophysics (IPA) Symposium, 2013, Madison.
- Exploring the neutrino sky and particle physics on the Megaton scale, Heraeus Seminar, 2013, Bonn.
- Arbeitstreffen Kernphysik Schleching, 2012, Schleching.
- TeV Particle Astrophysics 2010, Paris.
- High-Energy Gamma-rays and Neutrinos from Extra-Galactic Sources, 2nd Heidelberg Workshop, 2009.
- Non-Thermal Hadronic Processes in Galactic Sources, 1st Heidelberg Workshop, 2008.

Prizes / Awards

- 2011, DFG, Heisenberg Professorship.
- 2005, DFG, Emmy-Noether Junior Research Group.
- 2002, The European Commission (FP5), Marie Curie Individual Fellowship.
- 1996, INFN Fellowship for undergraduate students.

Curriculum Vitae

Stefano Veneziano, born in Rome, the 24th of November 1963.

Current position:

Director of Research (I fascia) at Istituto Nazionale di Fisica Nucleare, Sezione di Roma. Currently Visiting Professor at Sapienza Universita' di Roma.

Responsibility for research projects financed and refereed by national and international reviewers.

- The First-level muon barrel trigger system of the ATLAS experiment, INFN Project Leader (94 months, 4.45 MEuro of budget, excluding R&D, manpower, travel and administration).
- The First-level trigger system, early First-level muon trigger system, early First-level muon barrel trigger system of the ATLAS experiment, CERN Project Leader (104 months).
- MCS (MicroCapillari Scintillanti) INFN Project, on the development of a new detector based on scintillating micro capillaries, for applications of hadron therapy and tracking in particle physics, (Coordinatore Nazionale) since september 2012.
- ATLAS First-level trigger system Coordinator, a co-joint Brazil, Germany, Italy, Japan, UK, US and CERN project, since april 2013.
- ATLAS First-level trigger system Upgrade Coordinator, since april 2013.

Research contracts from international institutions

- visiting scientist (Scientific Associate) at CERN Experimental Physics Division, January 1999 - March 2000.
- visiting scientist (Scientific Associate) at CERN, Experimental Physics Division, July 2006 - July 2007.
- project associate at CERN, Experimental Physics Division, for the ATLAS Experiment August 2007 - August 2008.

Education and scientific career

- Since October 2013, two-year exchange program Agreement with Sapienza Universita' di Roma, as defined in "art. 6, comma 11, della Legge. 30 dicembre 2010, n. 240 (exchange with F. Ferroni).
- in September 2013 won the Abilitazione Scientifica Nazionale, Professore di Prima Fascia (Full Professor), in the "Experimental Particle Physics" field.
- became Director of Research (I fascia) at Istituto Nazionale di Fisica Nucleare, January 2007.
- became First Researcher (II fascia) at Istituto Nazionale di Fisica Nucleare, February 2000.
- became Researcher (III fascia) at Istituto Nazionale di Fisica Nucleare, November 1991.
- INFN Fellowship on Particle Physics Research, February 1989 - August 1991.
- A. Della Riccia Fellowship, for visiting CERN, February-December 1989.
- Laurea di Dottore in Fisica at Universita' La Sapienza, 110/110 cum laude, discussing the thesis called "Il calorimetro a Uranio e camera a ionizzazione a liquido a temperatura ambiente dell'esperimento UA1 al collider protone-antiprotone del CERN". Supervisor Professor F. Ceradini within the UA1-Rome group of INFN and Universita' La Sapienza, in Rome, September 1988.
- Technical Student at CERN, February 1987 - April 1988.
- Summer student at CERN, July-September 1986.

Functions and scientific responsibilities

- September 2014: responsible for PFC (Particle Flow Calorimetry), a two year national project financed by INFN, for the development of a new calorimeter, in collaboration with CERN and Shinshu University, Japan.
- 2014, ECFA member for the HL-LHC project, Trigger, Online and Offline Processing Group. This group will provide guidelines to all experiments for the design of trigger systems, online and offline computing working at High Luminosity LHC.
- 2014, Organiser of the TWEPP 2014 workshop, Topical workshop on electronics for Particle Physics.
- 2013, ECFA member for the HL-LHC project, muon detectors group. This group provided guidelines to all experiments for the design of muon detectors, trigger systems and related electronics working at High Luminosity LHC.
- since April 2013: ATLAS Level-1 System Coordinator and ATLAS Level-1 Upgrade Coordinator, member of the Trigger DAQ Steering Group.
- September 2012: Responsible for MCS (MicroCapillari Scintillanti), a two year national project financed by INFN, for the development of a new particle detector, in collaboration with EPFL Lausanne and CERN.
- September 2007 - September 2008: Project leader of the ATLAS First level Trigger System, an international collaboration between CERN, Germany, Israel, Italy, and United Kingdom for the operation of the Calorimetric, Muon and Central Trigger Processors of the experiment.
- March 2005 - September 2008: member of the Steering Group for the Installation and Commissioning of the ATLAS Muon Spectrometer, with responsibility of the integration of the Muon Trigger.
- June 2002 - December 2004: Project Leader (CERN), of the LVL-1 Muon Project, a collaboration of research groups from CERN, Israel, Italy and Japan. In January 2004 became member of the ATLAS Trigger and Data Acquisition Steering Group.
- September 2002 - March 2003: Observer in the National Scientific Commission I (particle physics) for National Scientific Commission V.
- September 2001 - September 2008: Project Leader of the First-level muon barrel trigger system of the ATLAS experiment (INFN).
- January 2000 - September 2008: Project leader (CERN) of the First-level muon barrel trigger system of the ATLAS experiment for the design, construction and Commissioning of the system, and the related Resistive Plate Chamber detector readout system.
- April 2000 - June 2006: head of the Electronics Laboratory of INFN, Sezione di Roma.
- June 1997 - December 2006: responsible for KLOE drift chamber readout system, DAPHNE accelerator, Frascati, Italy.
- May 1997 - December 1998: head of the Electronics Laboratory of INFN, Sezione di Roma. Left to visit CERN.

- May 1997 - March 2003: Scientific Secretary of National Scientific Commission V (new technologies, detectors, accelerators and instrumentation).
- March 1997- March 2003: Coordinator of the Rome activities of National Scientific Commission V.
- March 1996 - October 1998: responsible for the data acquisition system of the Muon test facility of the ATLAS experiment, on the H8 test beam at CERN.

Scientific activity

During my scientific career I have dealt with many challenges covering a broad spectrum of subjects related to High Energy Physics: calorimetry, muon detection, gas detectors, photosensors and scintillating detectors, detector Montecarlo studies and data analysis, trigger systems, data acquisition systems, instrumentation, electronics architecture and system design, ASIC designs, large detector design, calibration and operation.

- 1986-1989: UA1 Experiment (CERN proton-antiproton Collider), b quark production and top quark search in the semi-leptonic channel. Uranium-Tethramethylpenthane warm liquid calorimeter upgrade.
- 1990-1996: WA92 Experiment (CERN West Area), beauty and charm hadro-production at the Omega spectrometer, on a 350 GeV/c pion beam. Muon filter and fast trigger design, DAQ.
- 1989-1990: Large Hadron Collider Muon Identification and Triggering working groups. Proposal for the use of Resistive Plate Chamber detectors for fast triggering. Test beam studies at H2 and X1 beams at CERN. Montecarlo studies of hadronic punch through in Iron and measurements.
- 1990 - 1994: Research and Development experiment at CERN RD5 (trigger systems and momentum reconstruction in high magnetic field). Studies on hadronic punch through and the production of electromagnetic secondaries from high-momentum muons. RPC detector performance studies and tracking capability.
- 1992 - 1997: Research and Development experiment at CERN RD27 (first level trigger systems for LHC experiments). Definition of the trigger architecture, later used in the muon barrel of ATLAS. Development of the trigger demonstrator Application Specific Integrated Circuit, in collaboration with Rutherford, UK.
- 1993 - 1999: KLOE experiment Drift chamber design, first prototypes, tests and data analysis. Development of the Time to Digit Converter ASIC of the drift chamber and the complete readout system.
- since 1992: ATLAS Collaboration.
  - 1992- 1994: Muon Trigger group. RPC simulations and tests, contribution to the Letter Of Intent. Trigger tower prototype on test beam, data analysis. ATLAS Technical Proposal, author of chapters relative to first level muon trigger.
  - 1995 - 1999: Development of the Test Beam Data Acquisition system of all Muon detectors. Collaboration with core DAQ group developing readout architectures in RD13.
    Final development of the details of the detector layout and trigger architecture, including the development of the dedicated Coincidence Matrix ASIC, used for triggering and readout. Study of the effects of radiation on electronics.
  - 1999-2000: contribution to the activities of Trigger/DAQ groups at CERN, developing the first prototype of the Read-Out-Buffer. The first element on the readout chain common to all ATLAS detectors.
  - 1993-2003: responsibility of the muon barrel trigger system design, leading also the design of software applications dedicated to initialisation, control and monitoring of the system.
  - 2003 - 2005: construction and assembly of the experiment, completion of ageing studies on detector. Final system tests on the H8 test beam facility at CERN.
  - 2003 - 2007: installation and commissioning of the experiment, full responsibility for the ATLAS first level-trigger system project.
  - since 2007: System calibration, optimisation of Momentum thresholds and calibration. The system is now working with more than 99% live time and efficiency on geometrical acceptance. It is a core system necessary for the success of the ATLAS experiment.
  - since April 2013: coordination of Atlas level-1 system and upgrade activities. I proposed the use of the Tile Calorimeter Detector as a muon tagger, to reduce the fake rate of the Muon End-cap trigger in the region 1.0<|Etal<1.3. This project has been approved and now under construction. I have been co-editor of the TDAQ TDR and I am Chair or Reviewer to many detector and trigger projects which will be installed for the next data taking period, or in Phase-I.
- 2012-2014: MCS, national coordination of a two-year project dedicated to the study of a novel detector based on MEMS technology and micro-fluidics. The collaboration is a joint effort of INFN Rome, INFN Milan, EPFL Lausanne and CERN.
- since September 2014: PFC, national coordination of a two-year project dedicated to the study of a calorimeter technique called Particle Flow. The collaboration is a joint effort of INFN Rome, INFN Milan, CERN and Shinshu University, Japan.

Referee for the Journal of Instrumentation JINST since 2007, for the MIUR program "Rientro dei Cervelli" during 2004 and for the "Albo Revisori MIUR" since january 2013.

Author of more than 376 cited papers (h-index 42, Web of Knowledge, h-index 77, i-10 index 257, Google Scholar),
See:
WEB OF KNOWLEDGE URL: http://www.researcherid.com/rid/J-1610-2012
or
GOOGLE SCHOLAR URL : http://scholar.google.com/citations?user=_fdZrX8AAAAJ

Teaching

- two-semesters Master graduate course "Laboratorio di Fisica Nucleare e Subnucleare", since october 2013.
- one-semester Bachelor course "Elettronica Generale", Fisica. Universita' Sapienza di Roma. Academic Year 2013-14.
- one-semester Master course "Elettronica Generale", Laurea Magistrale in Fisica. Universita' Sapienza di Roma, academic years 2011-12, 2012-13.
- Master course "Progettazione di ASICs", Dipartimento di Fisica. Padua University, from Academic year 2005-2006 and 2006-2007.
- "Laboratorio di Fisica Nucleare e Subnucleare", (Professore a contratto) Corso di Laurea in Fisica, Universita' La Sapienza, Roma, from 01/1999 to 03/2000.
- Academic years 1999-2000, 2000-2001, 2001-2002, 2002-2003, 2003-2004, 2004-2005 (Teaching Assistant), Esercitazioni di laboratorio del corso di 'Laboratorio di Fisica Nucleare e Subnucleare'. Corso di laurea in Fisica, Universita' la Sapienza, Roma.

- Academic years 1992-1993, 1993-1994, 1994-1995, 1995-1996, 1996-1997 (Teaching Assistant), Esercitazioni di laboratorio del corso di Sperimentazione di Fisica III. Corso di laurea in Fisica, Universita' la Sapienza, Roma.

I have been Thesis Advisor for many Master theses in Physics at Sapienza Universita', Rome.