

	<p>Prof. Angela Bracco</p>	<p>Professor  Dipartimento di Fisica  Università degli Studi di Milano and INFN sez. Milano  Via Celoria, 16  20133 Milano  Italy    angela.bracco@unimi.it  +</p>	<p>Prof. Angela Bracco holds a Ph.D. in Physics from TRIUMF laboratory at UBC Vancouver and University of Manitoba in Canada. From 1984 she has had academic positions at the Università degli Studi di Milano and since 2002 she is full professor. Her research is in the field of experimental Nuclear Physics (with focus on gamma spectroscopy for nuclear structure). Most of the experimental work of her research activity was made employing heavy ions reactions with stable and unstable isotopes and gamma spectroscopy. In this connection the research was and is being carried out as a member of several European collaborations around large detector arrays for gamma-ray spectroscopy, ex. AGATA. She is currently involved in nuclear structure experiments at several laboratories in Europe and also in Japan (RIKEN and Osaka).</p> <p>In connection with her experience in managing research she has been a member of several committees and panels dealing with activities in particle and nuclear physics, technical developments and applications. She was member of evaluation panels in Europe, USA and Japan. She has broad experience in managing research funding and personnel. She acted as chair of Nuclear Physics Board of INFN, in several selection committees for INFN and University personnel, in the governing board of the EU projects NupNet , chair of NuPECC (the European Collaboration Committee for Nuclear Physics).</p> <p>She was member of the Executive Board of the European Physical Society, Member of the CISA committee for international affairs of APS and she is presently the President of the Italian Physical Society.</p>
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CV of Mauro Mezzetto.

Graduated on 15/12/1982, Ph.D on 13/7/1987, Dirigente di Ricerca INFN since 2010.

Member of the T2K, Hyper-Kamiokande, Juno and Enubet experiments.

From December 2011 to November 2019 Director of INFN Sezione di Padova.

Chairperson of the EPS-HEPP Board, former member of the APPEC Scientific Advisory Committee, and of the External Scientific Committee of IFAE (Institut de Fisica d'Altes Energies) Barcelona.

Chairman and Editor of the ``Neutrino Telescopes Workshop'' 2011, 2013, 2015, 2017, 2019, 2021 editions.

Chairman and Editor of the "EPS-HEPP 2017" International Workshop in Venice.

Socio dell'Istituto Veneto delle Scienze, Lettere ed Arti.

About one hundred talks at international conferences and workshops and about 150 papers on international journals.

Awarded with the Breakthrough Prize in Fundamental Physics in 2015 as a member of T2K collaboration.

## Graziano Bruni - Curriculum Vitae

**Work address:** INFN - Sezione di Bologna  
Via Imerio, 46  
I-40126 Bologna BO  
**e-mail:** graziano.bruni@bo.infn.it

### Education and professional experience

2011 – 2019    director, INFN Division of Bologna  
2010 - 2012    adjunct professor, Engineering Faculty - University of Bologna  
since 2009    director of research, INFN  
2000 – 2009    senior researcher, INFN  
1995 – 1998    adjunct professor, Department of Physics - University of Bologna  
1988 - 2000    researcher, INFN  
1987 - 1988    post-doc fellowship, INFN  
1987            PhD degree in Physics, University of Bologna  
1984 - 1986    PhD fellowship, University of Bologna  
1983            LMU Munich University (Germany)  
1982 - 1983    CERN unpaid associated  
1982            graduation in Physics - University of Bologna

### Research summary (experimental particle physics)

- 2017-now: experiment FOOT (Fragmentation On Target) – study of fragmentation of  $^{16}\text{O}$  and  $^{12}\text{C}$  target nuclei by 150-250 MeV proton collisions.
- 2005-now: experiment ATLAS at the LHC pp collider at CERN (RPC barrel muon trigger detector, silicon Insertable B-Layer, detector simulation and data analysis).
- 1999-2001: experiment AMS (phase 1) on the International Space Station for cosmic anti-matter searches (time-of-flight detector).
- 1988-2003: experiment LVD: search for galactic stellar collapses via neutrino detection at the LVD experiment at the underground INFN National Gran Sasso Laboratory; studies on atmospheric muons and extended showers (limited streamer tube muon detector, global event reconstruction, Monte Carlo simulation and data analysis).
- 1988-2007: experiment ZEUS: deep inelastic scattering at the ep collider HERA at DESY, Hamburg (forward muon spectrometer, muon reconstruction, trigger, Monte Carlo simulation and data analysis).
- 1982-1987: experiment CERN-NA4 (BCDMS collaboration) at CERN - fixed target muon-nucleon deep inelastic scattering (multi wire proportional chambers and liquid scintillator-based trigger, Monte Carlo simulation and data analysis).

### Direction and coordination tasks

2012 - 2019    Director, INFN division of Bologna.  
2008 - 2012    Group leader of the ATLAS group of Bologna.  
Member of the ATLAS Collaboration Board.  
2005 - 2012    Referee of the CDF (2005-2008), CMS (2008-2009), JLAB12 experiments (2009-2012) for INFN National Committees I and III.

- 2004 - 2011    Coordinator of the experimental activities at accelerator facilities for the INFN division of Bologna (member of the INFN National Committee I).
- 1999 – 2003    Coordinator of the Italian ZEUS groups.  
ZEUS contact person in the INFN National Committee I.  
Member of the ZEUS Executive Committee.
- 1997 - 2005    Responsible of the operation of the ZEUS FMUON spectrometer.  
Group leader of the ZEUS group of Bologna.

I served as member of committees for the selection of PhD students and researchers in particle physics.

## Teaching (University of Bologna)

- 2010 - 2012    Adjunct professor, Electromagnetism - Civil engineering and Computer science.
- 1999 - 2002    PhD Lectures on Deep Inelastic Scattering - theory and experiment.
- 1995 - 1998    Adjunct professor, Statistical Methods in experimental physics.
- 1990 - 1995    Lectures on Statistical Methods and Particle Physics.

## Organization of scientific events

- ICHEP 2022, 41<sup>th</sup> International Conference on High Energy Physics, to be held in Bologna in July 6-13, 2022
- LHCp 2018, 6<sup>th</sup> Annual Conference on Large Hadron Collider Physics, Bologna, June 4-9, 2018
- Beauty 2013, 14<sup>th</sup> International Conference on B-Physics at Hadron Machines, Bologna, April 8-12, 2013
- 3<sup>rd</sup> Atlas-Italy Physics Workshop, Bologna, June 16-17, 2009
- 4<sup>th</sup> Italian Workshop on the ATLAS and CMS Physics, Bologna, November 23-25, 2006
- DIS 2001 - 9<sup>th</sup> International Workshop on Deep Inelastic Scattering, Bologna, April 27 - May 1, 2001
- 6<sup>th</sup> San Miniato Topical Seminars on Neutrino and Astro-Particle Physics, San Miniato, May 17-21, 1999

## Bibliometric information

More than 450 published papers in refereed journals with 100+ citations (h-index=145 excluding self-citations - source: inSPIRE, May 7, 2022).

<b>Citation summary results</b>	<b>Citable papers (excluding self cites)</b>
<b>Total number of papers analyzed:</b>	1,323
<b>Total number of citations:</b>	99,540
<b>Average citations per paper:</b>	75,2
<b>Breakdown of papers by citations:</b>	
Renowned papers (500+)	10
Famous papers (250-499)	36
Very well-known papers (100-249)	179
Well-known papers (50-99)	294

## Some selected papers of the main projects

1. Measurements of the Higgs boson production and decay rates and constraints on its couplings from a combined ATLAS and CMS analysis of the LHC pp collision data at  $\sqrt{s}=7$  and 8 TeV, ATLAS and CMS collaborations, **JHEP 08 (2016) 045** (cited 1640)
2. Combined Measurement of the Higgs Boson Mass in pp Collisions at  $\sqrt{s}=7$  and 8 TeV with the ATLAS and CMS Experiments, ATLAS and CMS collaborations, **Phys. Rev. Lett. 114 (2015) 191803** (1985 citations)
3. Evidence for the spin-0 nature of the Higgs boson using ATLAS data, ATLAS collaboration, **Phys. Lett. B 276 (2013) 120-144**, (cited 850)
4. Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC, **Phys. Lett. B 716 (2012) 1-20** (cited 13222)
5. Combined measurement and QCD analysis of the inclusive  $e^+p$  scattering cross sections at HERA, H1 and ZEUS Collaborations, **JHEP 1001 (2010) 109** (cited 1185)
6. Measurement of the neutral current cross-section and  $F_2$  structure function for deep inelastic  $e^+p$  scattering at HERA, ZEUS Collaboration, **Eur. Phys. J. C21 (2001) 443-471** (cited 577)
7. The Alpha Magnetic Spectrometer (AMS) on the International Space Station. I: results from the test flight on the space shuttle, AMS Collaboration, **Phys. Rep. 366 (2002) 331-407**, **Phys. Rep. 380 (2003) 97-98** (erratum) (cited 434)
8. Cosmic Protons, **Phys. Lett. B490 (2000) 27-35** (cited 337)
9. Muon 'Depth Intensity' relation measured by LVD underground experiment and cosmic ray muon spectrum at sea level, LVD Collaboration, **Phys. Rev. D58 (1998) 092005** (cited 148)
10. Neutrino induced and atmospheric single muon fluxes measured over five decades of intensity by the LVD at Gran Sasso Laboratory LVD Collaboration, **Astrop. Phys. 3 (1995) 311-320** (cited 54)
11. A high statistics measurements of the deuteron structure functions  $F_2(x, Q^2)$  and R from deep inelastic muon scattering at high  $Q^2$ , BCDMS Collaboration, **Phys. Lett. B237 (1990) 592-598** (cited 486)
12. A high statistics measurement of the proton structure function  $F_2(x, Q^2)$  and R from deep inelastic muon scattering at high  $Q^2$ , BCDMS Collaboration, **Phys. Lett. B223 (1989) 485-489** (cited 821)

Bologna, May 7, 2022

Graziano Bruni