

Biographical Sketch

Teresa Montaruli

A. Professional Preparation

1993 M.Sc., Physics, University of Bari, Italy
1994 Specialization in Physics at University of Bologna, Italy
1998 Ph.D., Physics, University of Bari, Italy
1998-2000 INFN PostDoc Fellowship in Experimental Physics

B. Professional Appointments

2007 Associate Professor University of Wisconsin – Madison
2006 Assistant Professor University of Wisconsin – Madison
2005 Visiting Scientist University of Wisconsin - Madison
2001 Tenured Assistant Professor University of Bari - resigned in 2009
2000 Research Assistant University of Bari

C. Awards and Designations

2009 Member of Particle Astrophysics and Gravitation Program Prioritization Panel of the Astronomy and Astrophysics Decadal Survey 2010;
Rapporteur for the International Cosmic Ray Conference, Poland;
2003 Rapporteur of the International Cosmic Ray Conference, Japan;
2001 Shakti P. Duggal Award “in recognition of significant contributions to cosmic ray physics by a young scientist of outstanding ability”.

D. Recent Seminars and Talks at Conferences

Recent Results from IceCube, American Physical Society Meeting, Denver, May 2009
Recent IceCube Results, Physics Colloquium, Kavli Institute for Cosmological Physics (KICP), Chicago, Mar. 2009
Searching for Astrophysical Neutrinos in Neutrino Telescopes, SNOWPAC2009, Utah, Feb. 2009
Neutrino Telescopes Results, University of Zurich, Dec. 17, 2008
Neutrino Telescope Results, CPPM, Marseille, Dec. 15, 2008
Results from the Neutrino Telescopes IceCube and ANTARES, Physics Colloquium, University of Wisconsin-Milwaukee, Nov. 2008
Astronomy with Neutrinos and IceCube, Physics Colloquium, University of Arizona, Tucson, Feb. 2008
Neutrino Astronomy in the ice, NOW2008, Lecce, Italy, Sep. 2008
Review on Neutrino Telescopes, CRIS 2008, Salina, Sicily, Sep 2008
The ANTARES underwater neutrino telescope, Seventh Alexander Friedmann International Seminar on Gravitation and Cosmology, July 2008, Joao Pessoa, Brazil.

E. Publications

1. R. Abbasi et al. (IceCube Collaboration), *First Neutrino Point-Source Results from the 22-String IceCube Detector*, submitted to ApJL (arXiv:0905.2253).

2. R.~Abbasi et al. (IceCube Collaboration), *Search for Point Sources of High Energy Neutrinos with Final Data from AMANDA-II*, Phys. Rev. D **79** (2009) 062001.
3. R.~Abbasi et al. (IceCube Collaboration), *Determination of the Atmospheric Neutrino Flux and Searches for New Physics with AMANDA-II*, Phys. Rev. D **79** (2009) 102005 (arXiv:0902.0675).
4. J.A. Aguilar et al. (ANTARES Collaboration), *Performance of the first ANTARES detector line*, accepted by Astrop. Phys., ASTROPARTPHYS-D-08-00157R1 (2009) (arXiv:0812.2095).
5. D. Horan et al., *Multiwavelength Observations of Mrk 421 in 2005-2006*, Astrophys. J. **695** (2009) 596.
6. J. Braun, F. J. Dumm, F. De Palma, C. Finley, A. Karle, T. Montaruli, *Methods for point source analysis in high energy neutrino telescopes*, Astropart. Phys. **29** (2008) 299.
7. P. Berghaus, T. Montaruli and J. Ranft, *Charm production in DPMJET*, JCAP06 (2008) 003.
8. A. Achterberg et al. (IceCube Collaboration), *The Search for Muon Neutrinos from Northern Hemisphere Gamma-Ray Bursts with AMANDA*, Astrop. J. **674** (2008) 357-370.
9. A. Achterberg et al. (IceCube Collaboration), *Multiyear search for a diffuse flux of muon neutrinos with AMANDA-II*, Phys. Rev. **D76** (2007) 042008.
10. L. Anchordoqui, F. Halzen, T. Montaruli, A. O'Murchadha, *Neutrino Flux from Cosmic Ray Accelerators in the Cygnus Spiral Arm of the Galaxy*, Phys. Rev. **D76** (2007) 067301.
11. A. Achterberg et al. (IceCube Collaboration), *Limits on the high-energy gamma and neutrino fluxes from the SGR 1806-20 giant flare of December 27th, 2004 with the AMANDA-II detector*, Phys. Rev. Lett. **97** (2006) 221101.
12. W. Bednarek, F. Burgio and T. Montaruli, *Galactic discrete sources of high energy neutrinos*, New Astron. Rev. **49** (2005) 1.
13. G. Battistoni, A. Ferrari, T. Montaruli and P.R. Sala, *The FLUKA atmospheric neutrino flux calculation*, Astrop. Phys. **19** (2003) 269.
14. M. Ambrosio et al. (MACRO Collaboration), *Measurement of Atmospheric Muon Neutrino Oscillations, Global Analysis of the Data Collected with MACRO Detector*, Eur. Phys. J **C36** (2004) 323.
15. M. Ambrosio et al. (MACRO Collaboration), *Neutrino astronomy with the MACRO detector*, Astrophys. J **546** (2001) 1038.
16. M. Ambrosio et al. (MACRO Collaboration), *Measurement of the atmospheric neutrino induced upgoing muon flux using MACRO*, Phys. Lett. **B434** (1998) 451-457.

F. Synergistic Activities

- PI of Fermi-GLAST proposal GLAST Investigator – Cycle 2
- PI and co-PI of UW graduate school proposals
- PI of proposals for observation time with the WIYN 0.9m telescope every semester since 2006
- Member of WIYN TAC and Associate member of VERITAS
- Co-I of HAWC NSF proposal, Co-I of IceCube NSF analyses proposals

- Member of Trigger and Filter board of IceCube experiment
- Coordinator of Multi-Wavelength working group of the ANTARES experiment
- Presented numerous lectures and colloquia for faculties, scientists, graduate and undergraduate students, taught in various International PhD schools.
- Young scientist representative for colloquia with International INFN referees.
- NSF Panel Reviews and Proposal Evaluations; Reviewer for the Swiss National Science Foundation (SNF) .
- REU mentor

G. Collaborators and Co-Editors:

The IceCube Collaboration

The HAWC Collaboration

The AMANDA Collaboration

The ANTARES Collaboration

The NEMO Collaboration

The MACRO Collaboration

The VERITAS Collaboration

L. Anchordoqui, University of Wisconsin - Milwaukee

E. Graduate and Postdoctoral Advisors

- Postdoctoral Advisor: Prof. C. De Marzo, University of Bari, Italy
- PhD Advisors: Prof. C. De Marzo, University of Bari, Dr. F. Ronga, Laboratori Nazionali di Frascati, Italy

Thesis Advisor and Postgraduate-Scholar Sponsor

- Graduate Students: Jon Dumm, Mike Baker, Amanda Kruse (UW-Madison)
- Postgraduate: Chad Finley, Patrick Berghaus, Dima Chirkin, Juan de Dios Zornoza, Juan Antonio Aguilar (UW-Madison)
- Undergraduate Students: Angie, Parker, Samuel Flynn, Joel Bressieux, Kristin Rosenau, Sujeet Sakula, Anthony Pavkovich, Erin Conrad, Kristin Larson, A.J. Heroux, Melissa Jacquart, Nicole Fields, Matthew Bayer.