

Martina Gerbino

Curriculum Vitae

Current position

2013 – Present PhD student in Physics, University of Rome “Sapienza”

Education

2010 – 2012 Master’s Degree in Astronomy and Astrophysics
University of Rome “Sapienza”,
final mark: 110/110 cum laude

2007 – 2010 Bachelor’s Degree in Physics
University of Rome “Sapienza”
final mark: 110/110 cum laude

Collaboration memberships

2013 – Present Member of the Planck-LFI Core Team

Publications

- 1 Ade P A R *et al.* [Planck Collaboration], *Planck 2015 results. XIII. Cosmological parameters*, arXiv:1502.01589 [astro-ph.CO]
- 2 Adam R *et al.* [Planck Collaboration], *Planck 2015 results. I. Overview of products and scientific results*, arXiv:1502.01582 [astro-ph.CO]
- 3 Gerbino M, Marchini A, Pagano L, Salvati L, Di Valentino E and Melchiorri A, *Blue Gravity Waves from BICEP2?*, Phys.Rev. D90 (2014) 047301
- 4 Di Valentino E, Gerbino M, Melchiorri A, *Dark radiation and the CMB bispectrum*, Phys.Rev. D87 (2013) 10, 103523
- 5 Gerbino M, Di Valentino E, Said N, *Neutrino anisotropies after Planck*, Phys.Rev. D88 (2013) 6, 063538
- 6 Said N, Di Valentino E, Gerbino M, *Planck constraints on the effective neutrino number and the CMB power spectrum lensing amplitude*, Phys.Rev. D88 (2013) 2, 023513
- 7 Benetti M, Gerbino M, Kinney W H, Kolb E W, Lattanzi M, Melchiorri A, Pagano L, Riotto A, *Cosmological data and indications for new physics*, JCAP 1310 (2013) 030

Conference papers

- 1 Gerbino M, *Neutrino mass scale in the era of precision cosmology*, J.Phys.Conf.Ser. 566 (2014) 1, 012003
- 2 Gerbino M, Di Valentino E, Said N, *Neutrino anisotropies after Planck*, Proceedings of the XLIXth Rencontres de Moriond, edited by Augè E, Dumarchez J, Trân Thanh Vân J, Publisher: ARISF, p.383 (2014).

Invited talks

- 1 9th LHC Days in Split, held in Split, Croatia, 29 Sep-4 Oct 2014, *Constraining Fundamental Physics with Planck*

Contributed talks and posters

- 1 Cosmology on Safari, held in KwaZulu Natal, South Africa, 26-30 Jan 2015, *Neutrino properties from cosmology and particle physics*, talk
- 2 Planck 2014 - The microwave sky in temperature and polarization, held in Ferrara, Italy, 1-5 Dec 2014, *Planck 2014 constraints on neutrino perturbations*, poster on behalf of the Planck collaboration
- 3 5th Young Research Meeting, held in Trieste, Italy, 14-15 Jul 2014, *Neutrino mass scale in the era of precision cosmology*, talk
- 4 International School of Space Science, Observing the Universe with the Cosmic Microwave Background, held in L'Aquila, Italy, 22-26 Apr 2014, *Non-standard physics in light of CMB experiments*, talk
- 5 Rencontres de Moriond, held in La Thuile, Italy, 22-29 Mar 2014, *Neutrino anisotropies after Planck*, poster
- 6 7th TRR33 Winter School, held in Passo del Tonale, Italy, 1-6 Dec 2013, *Neutrino anisotropies after Planck*, talk
- 7 International School of Physics "Enrico Fermi", New Horizons in Observational Cosmology, held in Varenna, Italy, 1-6 Jul 2013, *Neutrino anisotropies*, poster

Teaching activities

- 2014 Preparatory courses for Mathematics Bachelor's
- 2013 – 2014 Tutor of the course 'Mechanics' for Physics Bachelor's
- 2013 – 2014 Tutor of the course 'Physics I' for Mathematics Bachelor's

Additional experiences

- 2011 Internship at NASA Goddard Space Flight Center (MD), resulting in the following work: Sakamoto, Gerbino, Cummings, *Classifying the X-ray Afterglow Light Curves Based on the Pulse Structure of the GRB Prompt Emission*, presented at the "Time Domain Astrophysics with Swift" conference, Clemson, SC, October 24-26, 2011

Computer skills

Good user of Linux-based and Mac OS X systems
Programming languages: Fortran, Python, C
Good user of the plotting program Gnuplot
Good user of the markup language \LaTeX

Honors and awards

- 2014 Grant for young researchers provided by University of Rome "Sapienza"
- 2012 Course for outstanding students, Master's Course in Astronomy and Astrophysics, University of Rome "Sapienza"
- 2008 – 2010 Course for outstanding students, Bachelor's Course in Physics, University of Rome "Sapienza"

2007 – 2012 Student at the University College 'Lamaro-Pozzani', Rome

Languages

Italian Mother tongue

English Advanced user

IELTS Academic, total score 8/9, December 2011, British Council, Rome