

Curriculum Vitae

Prof. Paolo de Bernardis
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Contact Information

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General Information

- Born in Firenze, 01/Feb/1959. Married, one son.
- Physics degree (Laurea) in 1982 at Università' di Roma La Sapienza (summa cum laude). Ph.D. in 1987. Researcher in 1984. Associate Professor in 1992. Professore straordinario at Università' di Roma La Sapienza (Nov. 2001). Full Professor since Nov. 2004.
- Author or co-author of more than 200 papers on international journals with referees, including a few renowned papers. The field of activity is **Experimental Astrophysics and Cosmology**, with focus on the Cosmic Microwave Background.
- H-index: 66, Citations > 20800 (Feb.2015, ADS database).
- Member of the 2nd, 14th, 18th National Antarctic Expeditions of "Programma Nazionale di Ricerche in Antartide".
- Dr. de Bernardis is the Italian Principal Investigator of the stratospheric balloon experiments **BOOMERanG-B98** and **BOOMERanG-B03** on the anisotropy and polarization of the Cosmic Microwave Background. In the Antarctic flight of 1998 BOOMERanG has detected for the first time acoustic oscillations in the primeval plasma, and demonstrated the flatness of the Universe. For these results he has been awarded the **Premio Feltrinelli** of the Accademia dei Lincei in 2001, as well as the Targa Piazzini of the INAF. In 2003 BOOMERanG/B2K was flown again, at which time detected the polarization of the CMB. For the BOOMERanG experiment Paolo de Bernardis and Andrew Lange were awarded the **Balzan Prize** in 2006; for the measurement of CMB anisotropy with BOOMERanG and MAXIMA Paolo de Bernardis, Andrew Lange and Paul Richards have been awarded the **Dan David Prize** in 2009. For the BOOMERanG experiment, he has been awarded the 2011 **Giuseppe and Vanna Cocconi Prize** for Particle Astrophysics and

Cosmology (European Physical Society). In October 2012 he has been awarded the **2011 Van Duzer Prize** by the IEEE Council on Superconductivity, for his work on CEB detectors in collaboration with Tarasov, Kuzmin, Edelman and Mashashbde.

- Co-investigator of the international balloon-borne experiments Archeops and MAXIMA, on the CMB;
- Co-investigator of the **High Frequency Instrument** of the **Planck** Satellite of the European Space Agency, launched on May 14th, 2009, and in charge for the cryogenic preamplifiers of all the HFI detectors.
- **Has led the international proposals B-Pol for the ESA Cosmic Vision Call 2008, COre for the 2010 call, PRISM for the Large Missions Science call 2013.**
- In 2008 the **SAGACE** satellite proposal, led by de Bernardis, has been selected for a phase-A study by the Italian Space Agency. Exploiting the capabilities of an innovative differential spectrometer, the mission is able to measure the spectrum of the Sunyaev-Zeldovich effect in thousands of clusters of galaxies, within the tight budget of a small class space mission. The full study, carried out in collaboration with an Italian space industry, has been concluded in 8 months and delivered at the end of 2008.
- Member of the Astronomy Working Group of the European Space Agency (2002-2004).
- Has served as a referee for the *Astrophysical Journal*, *Astronomy and Astrophysics*, *MNRAS*, and *Nature*.
- One of the editors of the *Journal of Cosmology and Astroparticle Physics* and of the *Memorie della Societa' Astronomica Italiana*.
- Teaches the classes of Astrophysics, Experimental Astrophysics, and Observational Cosmology for the Physics and Astrophysics degree. He has been advisor for 40 Physics degree thesis as well as 12 Ph.D. thesis.
- Corresponding member of the **Accademia Nazionale dei Lincei**.
- Member of the Italian Academy of Science "Accademia Nazionale delle Scienze detta dei XV."
- Author of the book "**Osservare l' Universo**" (Observing the Universe) for the general public (Il Mulino, Bologna, 2010), and very active in outreach activities.