

Della Valle Massimo

Position: Director for Research

Istituto Nazionale di Astrofisica-Napoli

Period covered: 1990-2009



I Scientific Work

The research activity spans several fields in the observational Astrophysics:

- a) Supernovae (local and at high redshifts) and measurement of the cosmological parameters;
- b) Gamma-ray bursts and their afterglows
- c) Supernova/GRB connection); d) Novae (galactic and extragalactic); e) Distance Scale.

Curriculum

1976. High School diploma, Brescia.

1983. Laurea in Astronomia, Università di Padova
(Summa cum Laude). Supervisor: Prof. L. Rosino.

1984. Fellow at the Asiago Astrophysical Observatory

1985. PhD student at the Byurakan Observatory (ex-URSS).
Supervisor: Prof. Ambartsumian.

1988. PhD in Astronomy Università di Padova. Supervisors:
Prof. L. Rosino, e M. Capaccioli

1989. Post-Doc at SISSA, Trieste

1990. Fellow at the European Southern Observatory, La Silla, Cile.

1994. Fellow at the European Southern Observatory, Munchen, Germany

1995. Assistant Professor at the Astronomy Dept., Universita' di Padova.

1999. Associate Astronomer at the Arcetri Astrophysical Observatory

2007. Adjunct Professor at the International Center for Relativistic Astrophysics Network, 65122, Pescara

2008. Director for Research at the Osservatorio Astronomico di Capodimonte, INAF-Napoli

2008-2009. Visiting Scientist at the ESO Telescope Division (on leave of INAF-Napoli)

Sabbatical leaves (longer than 1 month)

1994, 1996, 1997, 1999, 2003, 2005. Visiting Scientist, European Southern Observatory, Garching.

1995, 1997, 2000, 2002, 2004. Visiting Scientist, Space Telescope, Science Institute, Baltimore.

1998, 2001, 2003. Visiting Scientist, European Southern Observatory, Santiago.

2006. Visiting Scientist, Department of Astronomy, Graduate School of Science, University of Tokyo, Japan

2006, 2007. Visiting Scientist, KAVLI Institute, Santa Barbara, California University

2007. Visiting Scientist, Dark Cosmology Center, Niels Bohr Institute, Copenhagen

2007. Visiting Scientist, Queen's University, Belfast, UK

Teaching

1989. Lecturer at the SISSA (Trieste): ``The Cosmological Distance Ladder".

1992. Visiting Professor, Centro de Astrofisica da Universidade do Porto, Portugal: ``The Late Stages of the Stellar Evolution" (grad. level).

Assistant Professor for Esercitazioni di Astronomia I (Padova, Astronomy Dept. a.a.1993/94; 1994/95; 1995/96; 1996/97).

Assistant Professor for Laboratorio di Fisica II (Padova Astronomy Dept. a.a. 1995/96).

Assistant Professor for Astrofisica (Padova Astronomy Dept. a.a. 1996/97).

Professor in charge of Astronomia Generale (Padova Physics Dept. a.a. 1996/97; 1997/98)

Professor at the Physics Dept. Ferrara University for “Tecniche Osservative in Astronomia” (a.a. 2002/03; 2003/04; 2005/06; 2006/2007; 2007/2008).

Professor at the Physics Dept. Ferrara University for “Tecniche Osservative in Astronomia” and “Supernovae”, PhD course (a.a. 2009/2010)

Lecturer in 11 national and international PhD Schools.

Publications:

Author of 386 scientific papers, 147 referred articles, 137 GCN and IAU telegrams and 102 contributes to International Conferences.

Outreach

Author of about 40 popular papers published on Astronomia, Coelum, Le Stelle and national newspapers.

2009 List of Publications

12. Hakobyan, A. A., Petrosian, A. R., Mamon, G. A et al. 2009, Ap, 52, 40 "Five supernova survey galaxies in the southern hemisphere. I. Optical and near-infrared database"
13. Agnoletto, I., Benetti, S., Cappellaro, E. et al. 2009, ApJ, 691, 1348 "SN 2006gy: Was it Really Extraordinary?"
14. Tanaka, M., Tominaga, N., Nomoto, K. et al. 2009, ApJ, 692, 1131 "Type Ib Supernova 2008D Associated With the Luminous X-Ray Transient 080109: An Energetic Explosion of a Massive Helium Star"
15. D'Elia, V., Fiore, F., Perna, R. et al. 2009, ApJ, 694, 332 "The Prompt, High-Resolution Spectroscopic View of the "Naked-Eye" GRB080319B"
16. D'Avanzo, P., Malesani, D., Covino, S. et al. 2009, A&A, 498, 711 "The optical afterglows and host galaxies of three short/hard gamma-ray bursts"
17. Henze, M., Pietsch, W., Della Valle, M. et al. 2009, A&A, 498, L13 "The very short supersoft X-ray state of the classical nova M31N 2007-11a"
18. Henze, M., Pietsch, W., Haberl, F. et al. 2009, A&A, 500, 769 "The first two transient supersoft X-ray sources in M 31 globular clusters and the connection to classical novae"
19. Tanaka, M., Yamanaka, M., Maeda, K. et al. 2009, ApJ, 700, 1680 "Nebular Phase Observations of the Type Ib Supernova 2008D/X-ray Transient 080109: Side-viewed Bipolar Explosion"
20. Taubenberger, S., Valenti, S., Benetti, S. et al. 2009, MNRAS, 397, 677 "Nebular emission-line profiles of Type Ib/c supernovae - probing the ejecta sphericity"
21. Poznanski, D. et al. 2009, Astro2010: The Astronomy and Astrophysics Decadal Survey, Science White Papers, no. 237 "Type II Supernovae as Probes of Cosmology"
22. Howell, D. A.; Conley, A.; Della Valle, M. et al. 2009, "Type Ia supernova science 2010-2020" White paper submitted to the Astro2010 committee
23. Raskin, C., Scannapieco, E., Rhoads, J. Della Valle, M. 2009, ApJ, "Prompt Ia Supernovae Are Significantly Delayed"
24. Salvaterra, R., Della Valle, M., Campana, S. et al. 2009, Nature, 461, 1258, "GRB090423 at a redshift of z~8.1"
25. Della Valle, M. 2009, AIPC, Vol. 1111, p. 393