

CURRICULUM VITAE

Giuseppe Gavazzi

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Born 27 July 1949 in Lecco (Italy), Italian citizen

Degree: Physics (1973) Universita' degli Studi di Milano

1975-77: postdoc fellow at Leiden Sterrewacht

1977-89: staff Member of Istituto di Fisica Cosmica of CNR, Milano

1986: visiting Scientist at NAIC (Arecibo)

1989-1994: associate Astronomer at Osservatorio di Brera (O.A.B.)

1994-2010: associate Professor at Universita' degli Studi di Milano - Bicocca

since 2010: full Professor at Universita' degli Studi di Milano - Bicocca

Responsibilities:

- 1991-1994: deputy-director of the O.A.B.
- 1991-1994: member of the scientific board of O.A.B.
- 1992-1997: member of the scientific board of the I.R.A. of CNR, Bologna
- 1993-1999: president of the scientific board of the Istituto CAISMI of CNR, Firenze
- member of the scientific board of the Laboratoire d'Astrophysique Spatiale (Marseille)
- 1999-2000: member of ESO OPC (panel "Normal galaxies").
- since 2012: member of directive council of physics department at Universita' di Milano - Bicocca
- 2000-2001: member of TAC of Telescopio Nazionale Galileo (TNG), panel "galaxies".

Grants

- CoI of PRIN MIUR 2012 (PI Haardt)
- CoI of PRIN INAF 2011 (PI Saracco)
- National PI of PRIN MIUR 2008 (200854ECE5)

Main field of specialization: extragalactic astronomy

Current research topics:

- Radio, infrared and optical observations of galaxies and of clusters of galaxies in the local universe
- Galaxy evolution
- Experience with the major radio telescopes (VLA, Westerbork, Arecibo, IRAM, NRAO 12m)
- Experience with optical and IR telescopes (TNG, LBT, ESO, Kitt Peak, San Pedro Martir, Calar Alto)

Main results

The scientific production of G. Gavazzi consists of 170 papers on refereed journals (65 as first author) (7165 citations, H-index: 48; ADS, December 2015). A selected list of 20 publications is attached.

The field of research of G. Gavazzi is the observational study of galaxy evolution in the local Universe using a twofold approach characterized by: a) large number statistics; b) multifrequency observations (spanning from the centimetric radio to the UV), including observations of the 1415 MHz HI and 115 GHz CO lines, H α line, Far and Mid Infrared and Near Infrared continuum emission.

The most significant contributions of G. Gavazzi in this field is the finding that the evolution of galaxies, i.e. the road that drive galaxies from star-forming to red-and-dead, is governed primarily by their mass (Gavazzi et al. 1996). An important secular mechanism is the formation in massive galaxies of bars that drag the gas toward the center where is consumed on short timescales by a burst of star formation, leaving the region occupied by the bar red and dead (Gavazzi et al. 2015b).

Another significant contribution of G. Gavazzi is the study of the environmental processes on galaxy evolution (Gavazzi et al. 2010, 2013, 2014, see reviews in Boselli & Gavazzi 2006, 2014).

G. Gavazzi is member of several international collaborations aimed at improving our knowledge of the Virgo cluster of galaxies. Since 2005 he is part of ALFALFA (completed in October 2012) (PI R. Giovanelli) which consists of a blind 21-cm survey of 7000 sq degrees of the sky, carried out with the Arecibo radio telescope. Since 2008 he is member of NGVS (Next Generation Virgo cluster Survey, PI L. Ferrarese) aimed at mapping the whole cluster in 5 bands with the 3.6m CFHT telescope. Furthermore G. Gavazzi is member of the HeVics collaboration (PI J. Davies) which has completed the Far-infrared survey of 100 sq degrees of the Virgo cluster with the Herschel satellite (ESA).

G. Gavazzi is also PI of the project dubbed H α 3 aimed at observing in the Hydrogen H α line all galaxies selected by ALFALFA with the San Pedro Martir (MX) telescope (Gavazzi et al 2012, 2013, 2015a, 2015b). Since the science verification period of ESO-MUSE G. Gavazzi is collaborating with Michele Fumagalli (PI) and Matteo Fossati on a project aimed at mapping the 3-D structure of galaxy ESO-00-137 in the Norma cluster (Fumagalli et al 2014, Fossati et al 2016).

GOLDMine. All observations taken by G. Gavazzi and his group are made available to the scientific community and to the general public via the WEB site GOLDMine (Galaxy On Line Database Milano network) (see Gavazzi et al 2003).

Teaching and Outreach

Gavazzi teaches two classes: Extragalactic Astronomy and Laboratory of Astrophysics (IV year). In both courses the main topic is the study of normal galaxies in the nearby universe using an observational approach. Furthermore the Lab consists of providing the students with tools for reducing and analyzing photometric and spectroscopic data which they take by themselves during some observing runs at the Loiano telescope (Bologna Observatory). In 2014-15 he has also given an introductory class in astrophysics for undergraduates. G. Gavazzi has been the thesis advisor of few dozens of master students, whose majority has undertaken a fruitful research career in Italy and abroad.

G. Gavazzi has always taken the outreach activity very seriously. He has written and illustrated "Quanto e' lontano il cielo" (How far is the sky) a book of astronomy for kids published in 7 languages: italian (Emme), german (Ravensburger), english (Cambridge University press), french (Casterman), spanish (AKAL), danish (Host & Son) and dutch (Muelenhoff).

His book "La colorata lentezza delle galassie" was published by Marsilio in 2008.