

Alessandro BOSELLI

DATE OF BIRTH : 30/07/1965, Lecco (Italy)
NATIONALITY : Italian
CIVIL STATUS : Married, 1 child
LANGUAGES : Italian, French, English, Spanish

PROFESSIONAL ADDRESS :
Laboratoire d'Astrophysique de Marseille
UMR 6110 CNRS, 38 rue F. Joliot-Curie
Château-Gombert
F-13388 Marseille, France
Tel: +33491056976/+33607537933
alessandro.boselli@lam.fr
<http://www.lam.fr/people/boselli>

ACCADEMIC CURSUS

1985-1990 : Physics degree at the Università di Milano, Italy ; grade 107/110
1990-1991 : Military service
1992-1993 : PhD at the Université de Paris VII : Multifrequency analysis of isolated and cluster spiral galaxies (supervisor J. Lequeux) ; grade : *mention très honorable avec les félicitations du Jury*.
1996: Junior researcher at the French CNRS (CR2)
2001: Senior researcher at the French CNRS (CR1)
2007 : HDR diploma : The effects of the environment on the evolution of late-type galaxies in nearby clusters
2010: Second class Director of Research at the French CNRS (DR2)
2017: First class Director of Research at the French CNRS (DR1)

MOBILITY AS STUDENT OR POSTDOC

1989-1991 : Istituto di Fisica Cosmica, CNR, Milano (Italie).
1992-1994 : DEMIRM, Observatoire de Meudon (France).
1995 : Max-Planck-Institut für Kernphysik, Heidelberg (Allemagne).
1996: Laboratoire d'Astrophysique de Marseille (France).

MOBILITY AS PERMANENT RESEARCHER

1998 : Invited at CEA, Saclay, to work on guaranteed time ISO project (1 month)
2001 : Invited at IAC, Tenerife, to work on the INT wide field camera data (1 month)
2002 : Invited at CEA, Saclay, to work on guaranteed time ISO project (1 month)
2003 : Invited at Carnegie Institute of Washington, Pasadena, USA, to work on GALEX (1 month)
2004 : Invited at Carnegie Institute of Washington, Pasadena, USA, to work on GALEX (1 month)
2012 : Invited Astronomer at ESO, Garching, Germany, to work on Herschel (2 months)
2013 : Invited Astronomer at ESO, Garching, Germany, to work on Herschel (2 months)
2016 : Invited Astronomer at ATNF (CSIRO), Sydney, Australia, to work on WALLABY (2.5 months)
2017 : Invited Astronomer at NRC Herzberg Astronomy & Astrophysics, Victoria, Canada, to work on NGVS and VESTIGE (3.5 months)
2021-2023: Associate Astronomer INAF at the Osservatorio di Brera, Milano, Italy
2023-: Associate Astronomer INAF at the Osservatorio di Cagliari, Italy

RESEARCH ACTIVITY

Formation and evolution of galaxies : derivation of observational constraints using a multifrequency analysis. Constructions of models for comparison with the observations :

1. **Physical properties of the ISM**
2. **Star formation activity**

3. **General properties of galaxies and scaling relations**
4. **Effects of the environment on galaxy evolution**
5. **3D structure of clusters of galaxies**

PUBLICATIONS

371 refereed papers (ApJ, AJ, MNRAS, A&A, A&ARev, PASP, Nature, ApLett&Comm), out of which: **53** as first author (1 review paper on PASP as first author, 2 invited review paper on A&A Review as first author)

(citations 29000, H-factor 89 on all publications; 4300 citations, H 35 for those as first author)

86 proceedings (**24** invited contributions to international conferences)

Professional book: A panchromatic view of galaxies, Wiley-VCH (ISBN -10: 3-527-40991-2 ; 324 pages), published: 12/2011 ; 1500 copies (also translated in Japanese)

2 outreach books: **A la découverte des Galaxies**, Editions-Ellispe (ISBN 978-2-7298-3445-6 ; 256 pages); **Alla scoperta delle galassie**, Springer Verlag Italia (ISBN: 978-88-470-1182-3)

7 IAUC communications, 9 press releases

RESPONSIBILITIES IN SPACE AND GROUND BASED PROJECTS

MeerKAT (2022-): Co-PI of the "*MeerKAT survey of the Virgo cluster*" (125h, Boselli et al. 2023b).

ASTROSAT/UVIT (2021-): PI of the Legacy Survey "*A UVIT Legacy Survey of the Virgo Cluster*" (864 ksec)

CFHT (2017-): PI of the Large Project "*VESTIGE : a Virgo Environmental Survey Tracing Ionised Gas Emission*" (78 nights ; Boselli et al. 2018).

Herschel (2009-2019): SPIRE Scientific Associate: PI of the guaranteed time project: "*The Herschel Reference Survey*" (*HRS* ; 114 h ; Boselli et al. 2010)

GALEX (2003-2020) Scientific Associate, PI of the open time legacy survey: "*A GALEX Ultraviolet Virgo Cluster Survey (GUViCS* ; Boselli et al. 2011 ; 94 orbits)

ISO (1996-2004): French responsible of the ISO CAM, PHOT, and LWS guaranteed time project "*A coordinated study of galaxies in the Virgo cluster*"

Co-I or Scientific Associate (2009-): NGVS, SMAKCED, CALIFA, AKARI, ALFALFA, SKA, MSE, WALLABY, VERTICO, ATHENA, MAUVE

DATABASES

- Responsible for the Herschel/SPIRE guaranteed time extragalactic projects: The Herschel Reference Survey, The Very Nearby Galaxy Sample and The Dwarf Galaxy Sample. (<http://hedam.lam.fr/>)
- GOLDMine Data Base Coordinator (<http://GOLDMine.mib.infn.it/>),
- GUViCS Data Base Coordinator (<https://observations.lam.fr/guvics/>)

TEACHING

2021: **Invited speaker at the XXXII Canary Island Winter School**, "Evolution of dwarf galaxies in high density fields" 4.5h.

2008-2010 : **Movilidad Profesores Masteres Oficiales, Departamento de Astrofisica de l'Universidad Complutense de Madrid**, "The effects of the environment on galaxy evolution" 10h/year

2006-2013 : **Master courses on astrophysics at the Université de Provence (Aix-Marseille)** : " The effects of the environment on galaxy evolution " (4h/year)

2000: **DEA courses at the Université de Provence (Aix-Marseille)**: "Physical properties of nearby galaxies : observational constraints to models of galaxy evolution" (4h/year)

PHD STUDENTS

L.M. Seille (2021-2024): starting in September with a handicap contract of the Université de Provence
J. Gomez-Lopez (2016-2019): industry
L. Ciesla (2009-2011): CR2 CNRS at LAM
E. Toloba (2008-2011): assistant professor, University of the Pacific, USA
L. Cortese (2003-2005): assistant professor, UWA Australia
With a major contribution to the formation of the PhD students:
M. Munoz-Sardaneta (2018-2021, co-supervised with P. Amram, LAM)
G. Consolandi (2015-2018, co-supervised with Gavazzi, Università di Milano) : industry
R. Marino (2011-2015, co-supervised with Gil de Paz, Universidad Complutense de Madrid): postdoc
A. Zapelli (1998-2001, co-supervised with Milliard, LAM): high-school teacher
D. Pierini (1996-1999, Gavazzi, Osservatorio di Brera) : industry
A. Contursi (1995-1998, Lequeux, DEMIRM) : tenure track position at MPIE Garching
S. Sauty (1993-1995, Casoli, DEMIRM) : industry

MASTER STUDENTS

S. Lescaudron (2 months in 2017) and A. Triantafyllaki (3 months in 2021 and 3 months in 2022), G. Bellusci (3 months in 2022), with a major contribution to the formation of C. Bonfanti, A. Zaccardo, G. Sanvito, I. Arosio, P. Pedotti, S. Zibetti, S. Martocchi, A. Donati, E. Bertagna, R. Decarli, M. Fumagalli, S. Fabello, F. Arrigoni-Battaia, M. Fossati, G. Consolandi, F. Cattorini master students ("tesi di laurea") of G. Gavazzi (Università di Milano), A. Schurer (dir. G.L. Granato, Osservatorio di Padova), K. Sternig (dir G. Hensler, Observatory of Wien).

POSTDOCS

J. Iglesias-Paramo (2001-2002): postdoc EU; current: assistant professor, IAA, Granada, Spain
E. Voyer (2011-2013): postdoc CNES; current: industry
M. Boquien (2011-2013): postdoc CNES; current: assistant professor, University of Antofagasta, Chile
A. Longobardi (2019-2021): postdoc CNES; current: postdoc at the Università di Milano, Italy

GRANTS

Australian Research Council (co-I)	2021-2023	395 kAUD
FONDECYT Chili (co-I)	2021-2025	65 keuros
Programme National Cosmologie et Galaxies (PI)	2002-2023	75.5 keuros
PICS avec NRC Herzberg Canada (PI)	2017-2019	15 keuros
Action Incitative du LAM (PI)	2017	3.7 keuros
ANR VIRAGE (PI node Marseille)	2011-2015	493 keuros
NASA-GALEX grant n.60001 (co-PI)	2011	60 k\$
PAI avec University of Vienna (PI)	2006-2007,2011-2012	10 keuros
PAI avec Instituto de Astrofísica de Andalusia (PI)	2001-2002	5 keuros
Physique et Chimie du Milieu Interstellaire (PI)	1997-2003	6 keuros

SCIENCE ADMINISTRATION

Team leader

2008-2011 : Physics of Galaxies team leader at the LAM (12 scientists, 3 ITA, 2 postdocs, 3 students)

Scientific Councils

2016-2018: Member of the Scientific Board of the CDS, Strasbourg
2008-2011: Member of the Scientific Board of the LAM (member of the bureau).
2000-2004: Member of the Scientific Board of the OSU of Marseille

Time Allocation Committees

2020-2021: Member of the TAC of the Subaru telescope
2001-2021: External referee for ASTROSAT, International Time Program for the Canary Island Telescopes, Gemini, CFHT on Chinese time, ALMA, Telescopio Nazionale Galileo
2014-2017: Member of the TAC of the CFHT telescope
2002-2012: Member of the TAC of the Nancay radiotelescope

Grant Allocation Committees

Invited referee for several National Science Foundations (Switzerland, Belgium, Australia, Chile, Austria, Germany, Canada, Italy, Poland, Brazil)

Conference Organisation

2017 : **SOC member** of the conference: Galaxy Evolution in Groups and Clusters at low redshift : Theory and Observations, Ringberg, Germany
2017 : **Co-organiser** of the conference : Galaxy Clusters Across Cosmic Time, Aix-en-Provence, France
2015 : **SOC member** of the conference : The Many Pathways to Galaxy Growth, Prato, Italy
2014 : **SOC chair** of the conference : Colorful Galaxies, Menaggio, Italy
2014 : **SOC member** of the conference : Future Directions in Galaxy Cluster Surveys, Paris, France
2012 : **SOC member** IAU N.23, Special session : Calibration of star formation rate measurements across the electromagnetic spectrum, Beijing, China
2012 : **SOC member** of the conference : GALEX Fest : exploring the UV universe, A conference to celebrate the 9 years of exploitation, Pasadena, CA, USA
2008 : **SOC member** of the conference : New Challenges to European Astronomy, JENAM 2008, on the section Matter cycle in Clusters of Galaxies, Vienna, Austria
1999 : **Co-chair of the workshop**: Les Galaxies Spirales, Strasbourg
1998 : **Chair of the workshop**: L'échantillon de galaxies à $z=0$, Meudon
1993 : **SOC co-chair** of the conference: Thermal and Non-Thermal Radio Emission of Galaxies, Ringberg, Germany

SCIENCE VULGARISATION

Invited reviewer at the first TED meeting in Italy: TEDx Lake Como (2009):

(<http://www.tedxlakecomo.com/>) ; presentation :
<http://www.youtube.com/tedxtalks#p/c/75C21C9FC46004A4>

21 large public presentations (7 during the 2009 Year of Astronomy), in France (17), Italy (3), and Austria (1)

Participation to the French "Fete de la Science" 2004 with several presentations at the Marseille Libraries (Alcazar, Saint Andree, Le Merlan) with the writer for children Muriel Bloch

Oral presentation at "La Ville Europeenne des Sciences", at the Grand Palais, Paris, 2008 (A la découverte des galaxies)

Interview at the TV chain France 3 at the launch of the Herschel satellite (14/05/2009)

LIST OF 5 MOST RELEVANT CAREER PUBLICATIONS

Boselli A., Gavazzi G.: "Environmental effects on late-type galaxies in nearby clusters", 2006, PASP, 118, 517 (review article)
Boselli A., Boissier S., Cortese S., Gavazzi G.: "The origin of dwarf elliptical galaxies in the Virgo cluster", 2008, ApJ, 674, 742
Boselli A., Lequeux J., Gavazzi G. : "Molecular gas in normal late-type galaxies", 2002, A&A, 384, 33

Boselli A., Gavazzi G., Donas J., Scodreggio M.: "1.65 micron (H-band) surface photometry of galaxies. VI. The history of star formation in late-type galaxies", 2001, AJ, 121, 753
Boselli A., Boissier S., Cortese L. et al. : "High-mass star formation in normal late-type galaxies : observational constraints to the initial mass function", 2009, ApJ, 706, 1527