

CONTACT

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CURRENT POSITION

since September 2016 Marie-Sklodowska-Curie AstroFI² COFUND fellow at INAF-OATs (Trieste)

EMPLOYMENT and MOBILITY

2015-2016 Post-doctoral researcher at Cosmology group, Scuola Normale Superiore (SNS), Pisa
2011-2014 Post-doc at Institute de RadioAstronomie Millimetrique (IRAM), Grenoble, France
2009-2011 Post-Doctoral researcher at CNRS - INSU - Saclay, France
2007-2009 Post-Doctoral researcher at Service d'Astrophysique, CEA - Saclay, France

CAREER BREAKS

June-October 2011 Maternal leave

EDUCATION

October 2, 2007 PhD in Astronomy, University of Rome *Tor Vergata*, Rome, Italy
Supervisor: Prof. R. Buonanno
June 30, 2003 Master in Astronomy, University of Padova, Italy
Supervisor: Prof. P. Rafanelli

HIGHLIGHTS

77 publications (**46** in peer-reviewed journals)
10 peer-reviewed publication as first author
4 publications as second/third author
1 Nature Research Highlight article
1 publication in Nature (third author)
2500 citations of peer-reviewed papers
400 citations of first-author papers
H index: 23
22 conference proceedings in non-peer-reviewed journals
15 talks given at international conference of astrophysics
15 invited presentations at international conferences, seminars and colloquia (4 invited reviews)

FELLOWSHIPS AND GRANTS

2016 Awarded Marie Skłodowska-Curie fellowship (H2020 AstroFI²)
2016 ERC Starting Grant 2016, project *SWING* selected for step 2 evaluation, not funded
2015 MIUR *SIR (Scientific Independence of Young Researcher)*, *SWING* project, selected for step 2 evaluation, not funded

TEACHING

- 2015-2016** Lectures on Radioastronomy at SNS Doctoral School (Pisa, Italy)
2012 Lectures on Millimetre interferometry and aperture synthesis
 IRAM Interferometry School, Grenoble, 15-19 October, 2012

INSTITUTIONAL RESPONSIBILITIES

- 2015-2016 Member of PhD Committees for the PhD Defence of Livia Vallini and Andrea Pallottini,
 Scuola Normale Superiore (Pisa, Italy)
 2015 Supervision of Graduate students, Scuola Normale Superiore (Pisa, Italy)
 2015 Internal seminars organisation, Scuola Normale Superiore (Pisa, Italy)
 2011-2014 Member of the Science Operations Group of IRAM (France)
 2011-2014 Responsible of monitoring/optimisation of NOEMA reflector surfaces at IRAM (France)
 2013-2016 Member of the Commissioning team of the NOEMA Interferometer (IRAM, France)
 2011 Supervision of Graduate student, IRAM (Grenoble, France)

COMMISSIONS OF TRUST

- 2016 Scientific reviewer for ESO Observing Programs Office, panel B, *Galaxies and Galactic
 Nuclei*, P98-P99
 2015 Scientific evaluator, SKA-driven Flagship Programs
 National Research Foundation/South Africa
 2012-2014 Reviewer of the *AGN science* panel of *XMM-Newton/ESA*
 2013-2015 Member of the “Galaxy Evolution” scientific working group for the SKA project
 2013-2015 Member of the “Astrophysics of feedback in local AGN” and “Formation and growth of
 the earliest SMBH” Science Working Groups for the ATHENA mission
 2010-2015 Referee for A&A, ApJ, MNRAS

MAIN COLLABORATIONS

- since 2015 Mainieri, *SUPER-a SINFONI Survey for Unveiling the Physics and Effect of Radiative
 feedback*, ESO
 since 2013 Tacconi, Combes, Garcia-Burillo, Neri, *PHIBBS2 Large Program at IRAM*
 Maiolino, KAVLI Institute (UK), *AGN outflows at high redshift*
 Sturm, Davies, MPE (Germany), *AGN outflows in local galaxie*
 Daddi, CEA-Saclay, *High redshift AGN in COSMOS, GOODS*.
 Fiore and the INAF-OAR extragalactic team, *Galaxy wide outflows in the near-ir using AO
 assisted spectroscopy/imaging, X-ray observations of AGN outflows*.
 Ceccarelli and Le Floch (IPAG, Grenoble), *Shocks and feedback in nearby galaxies*

PI SHIP OF OBSERVING PROJECTS

- since 2009 PI of 22 accepted observing projects at IRAM, ALMA, ESO, EVLA

OBSERVING EXPERIENCE

- 2011-2014 Extensive experience of observations with (sub)-mm interferometers
 2005-2007 Observing runs with optical/near IR spectrographs (FORS2/VIMOS/VLT and EFOSC/3.6m)

INVITED TALKS AT INTERNATIONAL CONFERENCES

- 2016 Invited speaker at the ESO-Athena Synergy Workshop (Garching, September 2016), talk on "Molecular outflows"
- 2016 Invited speaker at the 1st Italian Workshop on Astrochemistry, Firenze, March 10-11, 2016 (opening talk about "Molecular complexity in the distant universe")
- 2016 Invited speaker, Sexten Center for Astrophysics Meeting
Sweeping galaxies clean: cold molecular outflows as drivers of galaxy evolution
February 14-19th, 2016 (Sexten, Italy)
- 2014 Invited Review Talk at "AGN11, Where black holes and galaxies meet" Conference, Trieste, 23-26 September 2014
- 2014 Invited speaker "mm and NIR observations of Mrk 231 at high spatial resolution"
Sexten Center for Astrophysics Meeting, *Behind the curtain of dust*, July 14-18th, 2014
- 2014 Invited talk "*Spatially resolved studies of AGN-driven outflows*"
"Science Goals of a Sub-arcsecond Far-infrared Space Observatory" Workshop
Rome, 17-18th February 2014
- 2012 Invited highlight talk "*Molecular outflows in local galaxies and at high-z*"
European Week of Astronomy and Space Science EWASS 2012, Rome, July 1-6, 2012

OTHER TALKS AT INTERNATIONAL CONFERENCES

- 2015 Science with MOS towards the E-ELT Era, Cefalu, Italy, September 7-11, 2015
Talk on "*AGN feedback studies with MOS spectroscopy*"
- 2015 Demographics and Environment of AGN from multi-wavelength surveys, Crete Island, Chania, September 21-24, 2015, talk on "*The multiphase outflow of Mrk 231*"
- 2013 Seeking the leaer actor on the cosmic stage: galaxies vs black holes, Castallammare del golfo, June 24-28, 2013, Talk on "*Multi-wavelength signatures of AGN feedback in AGN*"
- 2012 Half a century of X-ray Astronomy, September 17-21, 2012, Mykonos, Greece
Talk on "*Millimeter and X-ray view of NGC6240*"
- 2010 High energy view of accreting objects; GN and X-ray binaries, Agios Nicolaos, Greece, October 5-14, 2010, Talk on "*Quasar feedback revealed by giant molecular outflows*"
- 2010 What drives the growth of black holes? Durham, UK, 26-29 July, 2010, talk on "*X-ray properties of power-law sources in COSMOS and CDFS*"
- 2009 EWASS European Week of Astronomy and Space Science, University of Hertfordshire, 20-23 April 2009, talk on "*Obscured Star Formation as a Function of the Environment in the COSMOS Field*"
- 2009 Galaxy evolution and environment, Kuala Lumpur, Malaysia, 30 March - 3 April 2009, talk on "*Obscured Star Formation as a Function of the Environment in the COSMOS Field*"
- 2009 COSMOS team meeting, Matsuyama, Japan, 15-18 June 2009, talk on "*Obscured Star Formation as a Function of the Environment in the COSMOS Field*"
- 2006 The multicoloured landscape of compact object and their explosive progenitors, Cefalu, Italy, June 11-24 2006, talk on "*QSO2 in the Elais-s1 field with XMM, Chandra, Spitzer and optical photometry and spectroscopy*"

SEMINARS AND COLLOQUIA

- 2015 *On AGN wind scaling relations*, INAF- OATs Colloquia, December 17, 2015
- 2015 *On AGN wind scaling relations*, INAF- OA-Arcetri Colloquia, November 16, 2015
- 2013 *Massive molecular outflows in nearby ULIRG/AGN*, INAF OABo Colloquia, May 6, 2013
- 2013 *Massive molecular outflows in nearby ULIRG/AGN*
IPAG - Institute of Planetology and Astrophysics of Grenoble Colloquia, 24 January 2013
- 2010 *Millimetre and X-ray view of the most obscured QSOs along cosmic time*
IRAM - Institute de RadioAstronomie Millimétrique Colloquia, 23 November 2010
- 2009 *Effects of galaxy environment on obscured star-formation and AGN activity in COSMOS*
University of Nottingham (UK), October 2009

- 2009 *Effects of galaxy environment on obscured star-formation and AGN activity in COSMOS*
The Royal Observatory of Edinburgh (UK), July 2009
- 2009 *The dependence of obscured star-formation activity and galaxy environment in COSMOS*
Astronomical Observatory of Roma, February 2009

OUTREACH ACTIVITIES

- 2015 Collaboration with *VIS - Virtual Immersions in Science*, outreach program of SNS
- 2014 Speaker at the "Fete de la science 2014", Grenoble, France
- 2013 Speaker for the reportage *NOEMA - The Norther Extended Millimetre Array*,
on France 3 Alpes ([noema-reportage](#))

PRESS COVERAGE

- 2013 The mega galaxy merger, *IRAM Press Release*
<http://www.iram-institute.org/EN/news/2013/77.html>
- 2010 Nature Research Highlights, Nature 467, 134, *Astrophysics: How the galaxy lost its stars*
<http://www.nature.com/nature/journal/v467/n7312/full/467134e.html>

SOCIAL SKILLS AND COMPETENCES

Good social skills, ability to adapt to any situation, competences acquired in the international environments mentioned above, in particular at IRAM-Grenoble where it was necessary to manage face-to-face contacts with user astronomers while offering support for proposal preparation and data reduction. I am also used to work in team and offer my knowledge and skills to get the best results and solve problems efficiently.

ORGANISATIONAL SKILLS AND COMPETENCES

I have a natural tendency towards the rationalisation of goals, and I have excellent organisational skills, both individual and of a group.

At IRAM I worked closely with the astronomers, engineering an technical teams of the Plateau de Bure Interferometer, sharing knowledges and best practices. At IRAM I had to autonomously conceive and develop the antenna surfaces monitoring and optimisation procedures, which implied close links with both the antenna engineers and telescope technicians.

TECHINCAL SKILLS AND COMPETENCES

I am expert of (sub)-mm interferometers and single dish radio telescopes, aperture synthesis, interferometric data analysis in the radio and (sub)-mm, data quality assessment - including NOEMA, ALMA, SMA, VLA and IRAM 30 m dish. Excellent knowledge of GILDAS and CASA softwares.

I am expert of antenna surfaces monitoring and optimisation, of etherodyne receivers, correlators and of instrumentation for sub-mm interferometers.

In 2014 I have participated into the commissioning activities of NOEMA for Antenna 7 at IRAM. In 2016 I have joined the IRAM NOEMA team to help as an *external expert during* the commissioning operations of NOEMA Antenna 8.

I am also expert of optical and NIR multi-object imaging and spectroscopy with 8m class telescopes, (FORS2, VIMOS, XSHOOTER and SINFONI@VLT) including IFU and AO data - this was acquired mainly during my PhD.

Good knowledge of data analysis in the X-rays - from the Chandra and XMM telescopes (Ciao, XSpec).

Good command of all main operating systems, Windows, Mac OS X, Linux.