# AFFILIATION Scientific Attaché to the Italian Consulate in Zurich (Switzerland) Ministero degli Affari Esteri e della Cooperazione Internazionale www.conszurigo.esteri.it 

SCIENTIFIC AFFILIATION Senior Staff Researcher<br>Istituto Nazionale di Astrofisica, Osservatorio di Astrofisica e Scienza dello Spazio OAS-Bologna<br>via Piero Gobetti 101, 40129 Bologna (Italy)<br>www.oas.inaf.it

PROFILE SUMMARY After a Degree in Physics at Sapienza, Università di Roma and a PhD in Physics, University of Perugia, I have spent more than 25 years in scientific and management activities: on space and ground-based astrophysics projects, building parts for satellites, planning and developing missions and experiments, transferring technology to industry, leading teams up to 150 people from different countries.
From May 2016 to February 2022, under appointment by INAF President, I represented INAF in multilateral and international collaboration governing bodies and at Italian Ministry for Foreign Affairs.
From April 2019 to February 2022 I served as President of the Comité Cientifico International, the governing body of the International Treaty managing the Canary Island Astronomical Observatory.
I have been awarded of the Gruber Prize 2018 as key person of the Planck Satellite Team.
I teach Space Projects Management at the University of Genova, Physics Department and at Master in Space Science at the University of Bologna, Alma Mater.
I supported Italian space industries, such as OHB-I, as scientific and technical advisor.
Since March 2022, I serve as Scientific Attaché to the Italian Consulate in Zurich.

2020-2022: ESA/PLATO satellite mission
In these years, I served as the Project Manager of the PLATO Camera on-bord the ESA PLATO space mission.
2007 - 2022: ESA/Euclid satellite mission
Among proposers of the Near-Infrared cryogenic spectrograph (NISP) on-board Euclid ESA mission (launch in 2023) and subsequently former NISP Project Manager and flight electronics technical team leader. Actually NISP in-flight Operation Manager Main activities included: supporting the scientific team for instrument design specific to space applications, material selection, thermal design, assembly integration and verification (AIV) planning, instrument flight operation planning.
From 2010 to 2021, I managed the overall Italian Scientific and technical contribution to the Euclid mission, under INAF appointment.
As Project Manager of the NIS/NISP instrument, I successfully brought the project from proposal to being adopted as one of the two instruments of ESA Cosmic Vision M2 mission and up to the first major technical review in 2011. Then, as Project Manager of the Italian contribution to the NISP instrument, I lead the Italian team in the implementation.
2013-2021: ESA/Athena satellite mission
I have been one of X-IFU (X-ray Integral Field Unit) Co-Investigators and member of X-IFU System Team, lead by CNES. As manager for the on-board Instrument Control Unit electronics for the X-IFU instrument, I lead the development team.
2015-2019: ESO E-ELT HiRES instrument
Project Manager of the ANDES/HiRES (High-REsolution Spectrograph) instrument on the E-ELT telescope, successfully leading the project in Phase A.
1997-2010: ESA/Planck LFI satellite mission

As responsible for cryogenic microwave on-board calibrator development, I timely delivered the unit (2005), which successfully completed its operations exceeding expected performance.

## 1997-2016: Millimetric Wave detectors and Radio Receivers

I participated and lead several scientific projects, among which: technology development for future missions on CMB polarization, a microwave telescope installed in Tenerife (Canary Islands) team, a millimetric imaging bolometric camera prototype development. More recently, I was senior technical advisor for an Italian company, contracted by ESA to build ground calibrators the MWI instrument on the MetOp SG satellites.

## 1993-1997: Astrophysics in Antarctica

Participated to three missions in Antarctica under ENEA/PNRA contract. Main activities included: experiment deployment at sea-level, high altitude remote camp and at French-Italian Concordia station on the Plateau; cryogenic instruments design and operations, Helium an Nitrogen liquefier operation, telescope SW maintenance, data reduction SW development, scientific data analysis.
Bibliography (2021): more than 320 published papers ( $<35000$ citations), most of them available at http://orcid.org/0000-0002-1170-0104. H-index (WoS): 76.

PERSONAL SKILLS
Mother tongue(s)

Other language(s)

English
French
Spanish
German

Italian

| UNDERSTANDING |  | SPEAKING |  | WRITING |
| :---: | :---: | :---: | :---: | :---: |
| Listening | Reading | Spoken interaction | Spoken production |  |
| C2 | C2 | C1 | C2 | C1 |
| C1 | C1 | B2 | B2 | B1 |
| B1 | B1 | A2 | A1 | A1 |
| A2 | A2 | A2 | A2 | A2 |

Organizational / managerial
skills

Beyond job-related experience, I have worked in public administration governing bodies:

- Elected Head of School Council (about 1000 students over 4 sites) for 6 years;
- Elected member of Bologna-Reno Local City Council (35000 resident citizens, mandate 2011-2016, with responsibility on Culture, Education, Inter-racial politics).

