

PERSONAL INFORMATION

Replace with First name(s) Surname(s)



📍 Affiliation
Department
Address.



Sex M | Date of birth

WORK EXPERIENCE

[Add separate entries for each experience. Start from the most recent.]

2019 - present

Researcher at INAF – Osservatorio Astronomico di Trieste

research on numerical modeling in different astrophysical context: dust dynamics in cometary atmosphere, protoplanetary discs, and dust plume dynamics after impact on an asteroid, MHD instabilities at magnetospheres of Earth and Mercury, and magnetoconvection simulations of sunspots; modelling star-planet interaction and habitability in planetary systems.

2011 - 2017

Postdoc at INAF – Oss. Astron. di Capodimonte, Naples and IAPS, (Italy);

2010 - 2011

Research Fellow (RF) at the University of Parthenope, Naples, (Italy)

2007 - 2008

Research Fellow at Astronomical Observatory of Catania, (Italy)

2005 - 2006

Research Fellow at MHD Group, Astroph. Inst. of Potsdam, (Germany)

2004 - 2005

External Collaborator at Geospace Hydrodynamics Lab, Inst. of Mechanics, Bulgarian Academy of Science, Sofia, (Bulgaria)

EDUCATION AND TRAINING

[Add separate entries for each course. Start from the most recent.]

2007-2010

Ph.D. in Applied Mathematics (University of Catania, Catania, Italy)
Title Thesis: "Central Weighted Non-Oscillatory(CWENO) and Operator Splitting Schemes in Computational Astrophysics"

1995-2003

M.Sc. in Mathematics (Sofia University "St. Kliment Ohridski", Faculty of Mathematics and Informatics, Bulgaria) and
M.Sc. in Information and Communication Technologies (Sofia University "St. Kliment Ohridski", Faculty of Mathematics and Informatics, Bulgaria)
Title Thesis: Title Thesis: Numerical simulations of Instabilities in Mixing Layer of Incompressible Viscous and Electrically – conductive Flow"

1996-2000

B. Sc. in Arts , Acting, (National Academy for Theatre and Film Art, Sofia, Bulgaria)

WORK ACTIVITIES

Main projects

- ESA/Comet Interceptor: **Associate Scientist** of the mission (2020-) and **Co-Investigator** of the DFP-COMPLEMENT instrument;
- ASI/LICIACube: **WP Lead** "Modeling dust dynamics in the plume expansion" (2019-);
- NASA/DART: **LICIACube Lead** of the Ejecta Working Group (2019-);
- ESA/HERA: **Team member** of Modelling Working Group (2020-);
- ESA/BepiColombo: **Co-Investigator** of the SERENA Instrument Suite (2018-

- **ESA/Rosetta: Co-Investigator** of GIADA Instrument (2018-);
- **ESA/Rosetta/GIADA: WP leader** of WP 3000 Dust Maps Evaluation of **ROSETTA GIADA** Enhanced Archive Data Delivery (2018-);
- **Scientific Lead** of CUBE-CME Catcher Carousel (Idea I-2021-05707 selected by ESA in the campaign “**Nanosatellites for space weather monitoring**”);
- **ASI/ASPIS – WP Lead**
- **ESA/ARIEL – Team member**
- **ASI/ANIME – Co-Investigator and WP Leader**
- **ASI/Life-in-Space**: member of INAF/OATS team (2019-);
- Participation in the following research projects: PRIN-INAf 2019 Planetary Systems At Early Ages (PLATEA); PRIN-INAf 2016(GENESIS-SKA),
- INAF Mainstream – **Principle Investigator** of “Non-spherical dust dynamics in protoplanetary disks: how dust particle realistic shapes change the dust evolution time scales,
- Spaceweather - Trieste Solar Radio System 2.0.

Tutoring activities

- **PhD supervisor** of the PON PhD Programme at the University of Trieste with title: “Sun-planet interaction and Space weather modelling studies for Earth awareness and Earth energy supplier sustainability.”
- University course “Planets and Astrobiology” at University of Trieste
- Master Students on protoplanetary disc dynamics and habitability

Awards

- Main-belt Asteroid (1981 EP12) was renamed “**11802 Ivanovski**” by the IAU for the contributions to the exploration of comets, particularly on the dynamics of aspherical dust grains in cometary atmospheres (2017).
- **Rosetta Group Achievement Awards**, ESA (2004/2017).
- **Young Scientist prize** 2003, Inst. of Mechanics, Bulgarian Academy of Sciences

Editorial activity

Monthly Notices of the Royal Astronomical Society, Icarus, European Physical Journal Plus, Planetary and Space Science
Guest Editor of Special Issue Universe.

Invited presentations

European Geophysical Union Congress 2020

Services in National and/or International Committees (recent ones)

- 2020-present **SOC chair of European Planetary Science Congress**
- **Chair of Italian Europlanet Regional Hub**
- **Elected member of INAF - National Scientific Group “ Sun and Solar System”** and Italian Space Agency Working Group “Solar System”
- **SOC member** of 5 national and international SOC's; **Chair of EPSC2020 Outreach; Member of four ISSI Teams** on cometary science topics
- **Lead of Machine Learning within EUROPLANET EPN-2024-RI**
- **INAf Deputy of EUROPLANET EPN-2024-RI project; INAF Lead of WP6 of EUROPLANET EPN-2024-RI; INAF Deputy of WP10 of EPN-2024-RI**
- *Grant COST-STSM-ECOST-STSM-CM0805-081011-011598* awarded by COST (European Cooperation in Science and Technology) Programme (2011)
- **Principal Investigator** of “Application of the Contemporary Information Technologies in the Modeling of Geospace” joined project between the **State Agency for Information Technology and Communications and the Institute of Mechanics, Bulgarian Academy of Sciences (2003)**

Grants

Publications

Total number of publications in peer-review journals (Scopus): 61
 Total number of citations 1700 (Google Scholar)
 H index (Scopus) 20