

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **Ettore Perozzi**
Address ASI - Agenzia Spaziale Italiana, Viale del politecnico snc, 00133 Roma
Telephone(s) Work [REDACTED] Mobile [REDACTED]
Fax(es)
E-mail ettore.perozzi@asi.it; [REDACTED]
Nationality Italian
Date of birth [REDACTED]
Gender [REDACTED]

Employment / Occupational field

Space Situational Awareness / Asteroid and Space Debris hazard

Dates 2017 – present ASI – Agenzia Spaziale Italiana (Roma, Italy);
 head of the SSA/SST Office;
 2012 – 2017 Deimos Space (Madrid, Spain & Bucharest, Romania)
 Project manager: NEO (Near-Earth Object) Segment contracts of the Space Situational Awareness (SSA) program of the European Space Agency (ESA).
 Operations Manager at the ESA NEO Coordination Centre (ESRIN, Frascati, Italy) <http://neo.ssa.esa.int>.
 2004 – 2012 Telespazio (Roma, Italy)
 Scientific Advisor: ASI (Agenzia Spaziale Italiana) small scientific missions, NASA lunar initiative, ESA Cosmic Vision, ESA Space Situational Awareness programme.
 2002 – 2004 Telespazio (Roma, Italy)
 Responsible for ESA programmes at the Telespazio Business Development Unit
 1998 – 2002: Observatoire de Paris-Meudon (France)
 Awarded the ESA “Giuseppe Colombo” senior fellowship at the Observatoire de Paris;
 Researcher: celestial mechanics, interplanetary mission analysis, accessibility of the Near-Earth Asteroids.
 1989 – 1998: Telespazio (Roma, Italy)
 Mission analyst: scientific missions (BeppoSAX, Sage, GGFeep2 etc); development of mission analysis and flight dynamics software
 1987 – 1988: Collurania Astronomical Observatory (Teramo, Italy)
 Researcher: main Lunar problem and interplanetary mission analysis
 1986 – 1987: Italspazio (Roma, Italy)
 Consultant for the development of mission analysis software to study the dynamical evolution of artificial satellites around the Earth

1984 – 1985: ESA/ESOC (Darmstadt, Germany)
 Visiting scientist: mission analysis of the ESA SOHO and Cassini/Huygens scientific missions

1981 –1983: Planetology Branch of the CNR Space Astrophysics Institute (Rome, Italy).
 Research fellow: of numerical methods in celestial mechanics
 Long-term evolution of Short-Period Comets and the use

Occupation or position held Scientific Advisor

Main activities and responsibilities ESA and EU Space Situational Awareness programmes; ESA NEO Segment developments. Italian delegate to the ESA SSA Program Board, ASI delegate to the EU SST Consortium and to the Inter-Agency Space Debris Coordination Committee (IADC). Keeping links and collaborations with the space science and astronomical community

Name and address of employer ASI - Agenzia Spaziale Italiana, Viale del politecnico snc, 00133 Roma

Type of business or sector Space Agencies

Education and training

Dates April 1981

Title of qualification awarded Laurea in Physics

Principal subjects/occupational skills covered Celestial Mechanics, Planetary Science.

Name and type of organisation providing education and training Reparto di Planetologia, Istituto di Astrofisica Spaziale del CNR, Roma, Italy

Personal skills and competences

Mother tongue(s) **Italian**

Other language(s)

Self-assessment
European level ()*

English

French

German

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient user	C2	Proficient user	C1	Proficient user	C2	Proficient user	C2	Proficient user
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	B1	Independent user
A1	Basic user	A1	Basic user	A1	Basic user	A1	Basic user	A1	Basic user

(*) [Common European Framework of Reference for Languages](http://www.cedefop.europa.eu)

Social skills and competences Long-standing experience in teamwork and leadership acquired in activities ranging from participating to international scientific collaborations to organising education and public outreach events and participating to TV and Radio programs.

Organisational skills and competences	<ul style="list-style-type: none"> - Head of the ASI SSA-SST Office (2017-2020) devoted to coordinating the Italian participation to the ESA and EU Space Situational Awareness Programs, and in particular on the hazard posed by the Near-Earth Objects (NEO) and by the Space Debris population. - Project manager of the industrial team carrying out the routine operations of the ESA NEO Coordination Centre (http://neo.ssa.esa.int) - Member of the organizing committee of the CELMEC international meetings on celestial mechanics (1993, 1997, 2001, 2005, 2009, 2013). - Chairman of the organizing committee of the international workshop "Novel Spaceways for Scientific and Exploration Missions" (Centro Spaziale del Fucino, 15-17 October 2007). - Scientific Director of the Space Academy Foundation, jointly instituted by Telespazio, Thales Alenia Space and the University of L'Aquila for fostering collaborations between research and industry. - Scientific Advisor of the Telespazio Science Systems and Applications Unit. - Lecturer at University courses and tutorship of several students during the preparation of their Laurea, Master, and PhD Thesis. - Founder member of the Italian Planetary Science Society (SISP) - Founder member and member of the scientific board of the Italian Celestial Mechanics and Astrodynamics Society (SIMCA) - Member of the editorial committee of the Telespazio house organ (newsletter Link-in). - Founder member of Tomo/asSaggi Science Bookshop (via degli Etruschi 4, Roma)
Technical skills and competences	<ul style="list-style-type: none"> - Dynamics of Solar System bodies: long term orbital evolution of Comets and Asteroids; main lunar problem; Near-Earth Objects (NEO) and Space Debris hazard and mitigation. - Celestial Mechanics: numerical integration methods; periodic orbits, Main Lunar Problem - Spaceflight dynamics: near-Earth and interplanetary mission analysis; small satellite scientific missions; NEO accessibility and targeting strategies; space manifolds dynamics. - Participation to the study teams of several scientific and exploration missions; - Leading role in the design, deployment and operations of the ESA NEO Coordination Centre. - Awarded the "Giuseppe Colombo" senior fellowship of the European Space Agency. - Winner of the Finmeccanica Innovation Award 2005 for Telespazio for the studies on the accessibility of the NEO population. - Author of more than 50 articles on international journals and conference proceedings - Co-Editor of specialistic books on celestial mechanics and flight dynamics (e.g. Moon Base: a challenge for humanity" -Donzelli 2007-, "Space Manifold Dynamics" - Springer US 2009, "Cosmic Visions in Celestial Mechanics" -Springer 2010. - Scientific writer of popular scientific books and articles for kids and for the public at large - Consultant to educational institutions and media companies for the realization of multimedia products and the organization of public outreach scientific events (e.g. RAI, Rome Planetarium, Hochfeiler s.r.l. ESA Communication, Frascatiscienza). - Consultant to corporate learning companies: space as a management training experience - Asteroid (10027) has been named "Perozzi"

Computer skills and competences

- Familiarity with Windows, Mac OSX operating systems,
- Microsoft Office and Adobe Photoshop advanced user
- Fortran programming

Artistic skills and competences

- Comics and design (basic courses on comics scripting and design)
- Guitar playing
- Radio DJ

Selected Publications

- E. Perozzi: *Discrete Mechanics: Some Remarks*. *Celestial Mechanics* n.30, 249-261, 1983.
- E. Perozzi: *Dynamics of the CASSINI Titan Close Encounter*. In proc. 'The Solid Bodies of the Outer Solar System', ESA SP-242, A. Coradini & M. Fulchignoni eds, 283-289, 1986.
- A. Carusi, L. Kresak, E. Perozzi, G.B. Valsecchi: *High-Order Librations of Halley-Type Comets*. *Astronomy & Astrophysics* 187, 899-905, 1987.
- E. Perozzi, A.E. Roy, B.A. Steves, G.B. Valsecchi: *Significant High-Number Commensurabilities in the Main Lunar Problem I: The Saros as a Near-Periodicity of the Moon's Orbit*. *Celestial Mechanics and Dynamical Astronomy* 52, 241-261, 1991.
- G.B. Valsecchi, E. Perozzi, A.E. Roy, B.A. Steves: *Periodic Orbits Close to that of the Moon*. *Astronomy & Astrophysics* 271, 308-314, 1993.
- G.B. Valsecchi and E. Perozzi: *Exploiting Earth Horseshoe Orbits for Space Missions*. *Planetary and Space Science*, vol.46 n.11/12, 1623-1626, 1998.
- A. Celletti, A. Milani, E. Perozzi (editors). *Second Italian Meeting on Celestial Mechanics*. *Planetary and Space Science*, special issue, vol.46 n.11/12, 215 pp, 1998.
- B. Sicardy, F. Roddier, C. Roddier, E. Perozzi, J.E. Graves, O. Guyon, M.J. Northcott: *First Ground-based images of Neptune's Ring Arcs*. *Nature* 400, 731-733, 1999
- E. Perozzi, L. Casalino, G. Colasurdo, A. Rossi and G.B. Valsecchi: *Resonant Flyby Missions to Near-Earth Asteroids*. *Celestial Mechanics and Dynamical Astronomy* 83, 49-62, 2002.
- R.P. Binzel, E. Perozzi, A.S. Rivkin, A. Rossi, A.W. Harris, S.J. Bus, G.B. Valsecchi, S.M. Slivan: *Dynamical and Compositional Assessment of Near-Earth Object Mission Targets*. *Meteoritics and Planetary Science*, 39, Nr.3, 351-366, 2004.
- A. Carusi, E. Perozzi, H. Scholl: *NEO Mitigation Strategy*. *Comptes Rendus Physique* 6, 367-374, 2005.
- F. Compagnone and E. Perozzi (editors): *Moon Base: a Challenge for Humanity*. Donzelli Editore, 121 pp, 2007.
- E. Perozzi and A. Di Salvo: *Novel Spaceways for Reaching the Moon: an Assessment for Exploration*. *Celestial Mechanics and Dynamical Astronomy* 102, 207-218, 2008.
- E. Perozzi and S. Ferraz-Mello (editors): *Space Manifold Dynamics: novel spaceways for science and exploration*. Springer New York, 258 pp, 2009
- A. Celletti, A. Giorgilli, E. Perozzi & S. Ferraz-Mello (editors). *Cosmic Visions in Celestial Mechanics* *Celestial Mechanics and Dynamical Astronomy*, v.107, issue 1, 2010.
- E. Perozzi. *The Near Earth Object Hazard and Mitigation*. In proc. 'Mathematical Methods for Planet Earth'. A. Celletti, U. Locatelli, E. Strickland eds, Springer IndAM Series, 2013.
- S. Di Pippo and E. Perozzi. *European Operational Initiative on NEO Hazard Monitoring*. *Handbook of Cosmic Hazards and Planetary Defense*. DOI 10.1007/978-3-319-02847-7_50-1. Springer International Publishing Switzerland, 2014
- M. Micheli, B. Borgia, G. Drolshagen, E. Perozzi, D. Koschny. *NEO follow-up, recovery and precovery campaigns at the ESA NEO Coordination Centre*. In *Asteroids: New Observations, New Models*, Proceedings IAU Symposium No. 318, S. Chesley, A. Morbidelli & R. Jedicke, eds. 2015.
- M. Cortese, E. Perozzi, M. Micheli, B. Borgia, E. Dotto, E. Mazzotta Epifani, S. Ieva, M. A. Barucci, D. Perna. *An efficient algorithm for prioritizing NEA physical observations*. *Meteoritics and Planetary Science*, doi:10.1111/maps.12810, 2016.
- D. Perna, E. Dotto, S. Ieva, M. A. Barucci, F. Bernardi, S. Fornasier, F. De Luise, E. Perozzi, A. Rossi, E. Mazzotta Epifani, M. Micheli, and J. D. P. Deshapriya. *Grasping The Nature of Potentially Hazardous Asteroids*. *The Astronomical Journal* 151:11 (14pp), 2016.
- E. Perozzi: "Il cielo che ci cade sulla Testa: Impatti Cosmici e Incontri Ravvicinati"; Il Mulino, Farsi un'idea, 2016.
- E. Perozzi: "Luna Nuova: dalle eclissi alle basi lunari". Il Mulino, Intersezioni, 2019.
- S. Ieva, E. Dotto, E. Mazzotta Epifani, D. Perna, C. Fanasca, M. Lazzarin, I. Bertini, V. Petropoulou, A. Rossi, M. Micheli and E. Perozzi. *Extended Photometric Survey of Near-Earth Asteroids*. *Astronomy & Astrophysics*, 2020.