

Simonetta Di Pippo

Date of birth: 30/06/1959 Nationality: Italian Gender: Female (+39) 3483388288 simonetta.dipippo@gmail.com Via Francesco Orioli, 29, 00119, Rome, Italy

About her: One-of-a-kind career in space activities. Visionary Leader, innovative thinker, highly skilled manager, STEM advocate, international complex programs, expert in change management, outstanding negotiator with globally recognised diplomatic skills, commercial space and space economy, one of the strongest supporters of space activities for sustainable socio-economic development and a firm believer in cooperation in space.

AREAS OF EXPERTISE

Strategic Planning	Industrial policy	Spin-off and start-ups
Visionary Leadership	Strategic alliances	Sustainable dev't
Risk management	Partnership dev't	Gender equality
Change Management	Public relations	Board management
Regulation	Media management	Space Economy
Programme mgmt	International relations	Teaching and advocacy
Negotiation and deals	Aerospace and science	Space security
Raising capital	Intergovernamental org	Space Diplomacy
Business development	New frontier tech	Capacity Building

WORK EXPERIENCE

23/03/2014 – CURRENT – Vienna, Austria DIRECTOR, UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS – United Nations

The Office for Outer Space Affairs of the United Nations (UNOOSA) works to bring the benefit of space to humankind. In her capacity as Director of UNOOSA, she manages and implement the programme on the peaceful uses of outer space, aimed at strengthening international cooperation in space activities and their use for achieving sustainable development, and she strives in promoting international cooperation in the exploration of space for economic, social and scientific development, in particular for the benefit of emerging and developing countries. She is in charge of the overall supervision of the various programmes of the Office, ranging from capacity building on space research and technologies to space law and policy, institutional/governance and on disaster risk reduction and emergency response; and is the senior advisor of the UN Secretary General on space affairs. She oversees three offices, one in Vienna, and two subsidiary offices, devoted on the use of space for disasters risk reduction, in Bonn (Germany) and Beijing (China). Her main stakeholders are Governments, IGOs, space agencies, industry and private sector, academia and civil society. Under her tenure, the Office reached historical accomplishments: Member States of the Committee on the Peaceful Uses of Outer Space (COPUOS) increased by about 32% (from 76 to 100), Voluntary Budget increased (XB from 18% to 30% over a stable Regular Budget), tens of agreements signed; she also launched many new initiatives, such as AccessToSpace4All (two

countries launched a satellite for the first time ever), Space4women, Space4ClimateAction, Space Economy, Space4Health, Space4Youth, Space Law for new Space Actors, KidsReachingStars, Space4SDGs, bringing the private sector at the table and increasing the number of stakeholders. Her most historical accomplishment has been the repositioning of OOSA in the UN Secretariat, in January 2020, establishing its role as the UN Executive Office for space.

06/2009 - CURRENT - Katwijk, Netherlands

CO-FOUNDER, WOMEN IN AEROSPACE EUROPE – WIA Europe

Women in Aerospace Europe (WIA-E) is an international association devoted to expanding women's opportunities for leadership positions and increasing their visibility in the aerospace community, which she co-founded in June 2009. In her capacity as WIA-E President (2009 - 2016), she was the CEO (Chief Executive Officer) and official spokesperson of WIA-E, had the responsibility to enter into agreements on behalf of WIA-E, and to appoint all committees, with the approval of the Board of Directors. Since June 2016, she has been appointed Honorary President. Since the beginning, she has been an ambassador for space in society and culture, advocating STEM as the backbone of a more balanced society. The association, legally located in The Netherlands, reached about 1000 members and 30 corporate members in just about 10 years of operations. WIA Europe is instrumental to advance to role of women and girls in the aerospace sector, and more in general, in the European society and is now the most important association in this field in Europe.

07/2020 – CURRENT – NY/Dubai/Geneva CO-CHAIR, WEF GLOBAL FUTURE COUNCIL ON SPACE – World Economic Forum

Starting from 2020, she was appointed as one of the two Co-chairs of the new WEF Global Future Council on Space. For a in depth description of the role of the Global Future Councils, please see below 'Member, WEF Global Future Councils on Space Technologies'. The space sector is evolving rapidly, with new public and private-sector actors propelling it towards commercial launch and space tourism, larger constellations to provide global connectivity and evermore precise Earth observation, as well as partnerships for lunar exploration and beyond. As the domain undergoes this important transformation, the Global Future Council on Space continues to explore critical challenges for the sector, such as the need for new governance frameworks, new forms of public-private collaboration and a greater understanding of the sector's socio-economic impact. The Council will continue to support the development and launch of the Space Sustainability Rating (SSR) as well as consider the future of Space Situational Awareness (SSA) to ensure sustainable growth in activity in Earth's orbits, and published in 2021 the Space for Net Zero report, coordinated by her.

05/2012 - 03/2014 - Brussels , Belgium

HEAD, EUROPEAN SPACE POLICY OBSERVATORY - Italian Space Agency

Her main tasks dealt with the harmonisation between the space component of the EC Horizon 2020 programme and the Italian national programmes, with the aim of maximising the industrial and strategic return of the Italian investment in the European framework (ESA+EU). She had a catalyser role and collector of Italian industrial and scientific interests, bilateral and multilateral, in order to facilitate the cooperation, in particular with EU small countries, the north European countries and the EU-non ESA Member States. She maintained interfaces with the Italian and European MPEs dealing with space in relevant committees and in the intergroup Sky&Space, being at the same time the ASI focal point for the Italian aerospace districts to facilitate their participation in strategic international programmes. In this context, her task was also to analyse the activities of the European Space Agency to be potentially harmonised with EC Horizon 2020. This was of extreme importance for Italy to define which programmes were more of its interest. This cross-sectoral and cross-institutional activities allowed her to gain a holistic view of the various space components, from the national, European Union and ESA perspectives, allowing her to build a one-of-a-kind experience on the European Union - ESA relationship's current challenges and way forward.

The Horizon 2020 Advisory Group Space (SAG) was a consultative entity set up by the European Commission to give consistent and consolidated advice to the EC during the preparation of the Horizon 2020 work programme. The SAG provided advice on potential priorities for Research&Innovation for the work programme 2016 - 2017, with the following main elements: Satellite Navigation – Galileo and EGNOS, Earth observation, Competitiveness of the European Space Sector: Technology and Science/Exploration, Protection of European assets in and from space (including space weather), SME Instrument and Fast Track to Innovation. As per mandate, SAG advice pertained to all activities under the relevant challenges: international cooperation, multi-disciplinarily, cross-cutting research and innovation, responsible research and innovation including gender, research career and skills development, bridging from discovery to market application, responding to emerging needs and unforeseen policy needs, sustainable development and climate change, dissemination, knowledge transfer and broader public engagement, SME participation, societal and economic impact. She strongly contributed therefore shaping the EC H2020 programme; this also allowed her to enter fully into the EC mechanisms and to deeply understand the EC internal processes.

03/2011 – 05/2012 – Noordwijk, Netherlands SPECIAL ADVISOR TO THE ESA DIRECTOR GENERAL – European Space Agency

As Special Advisor to the ESA Director General, she was entrusted with the task of monitoring the evolutions in the space sector and advise DG on topics relevant to the preparation of his Agenda 2015. Of particular relevance here, she developed the WES (Women in the European Space Sector) project, which started with the collection of statistical data at ESA and its main stakeholders, containing main recommendations which have been then included in his Agenda 2015. Among the various recommendations, two of them have been then implemented providing a lot of added value in the ESA management and towards equality: 1) the top management and in particular the DG, need to fully embrace the concept of equality with concrete actions, and 2) a dedicated office in the ESA organisational structure must be devoted to these topics. As a result, a ESA diversity officer has been appointed few years ago. Her knowledge on this topic and her dedication to reach a balanced representation for the benefit in particular of young female professionals in the aerospace field, is also based on the strong believe that we have to avoid any form of discrimination to build a better future for a stronger ESA, Europe and all of humanity.

05/2008 - 03/2011 - Noordwijk, Netherlands

DIRECTOR, HUMAN SPACEFLIGHT - European Space Agency

She, as Director of Human Spaceflight, was responsible for the European contribution to the International Space Station (ISS), ESA's programmes in life and physical sciences, their promotion and exploitation as well as the definition, preparation and implementation of future European human spaceflight activities, in LEO and beyond (human exploration) and the build-up of European capabilities (space infrastructure, transportation, ground segment). She managed a 600 M€ annual budget and a workforce of about 350 people from all over Europe and Canada. The Directorate was based at ESA/ESTEC and she was responsible and interfaced with many other offices and facilities: the European Astronaut Center (EAC) in Cologne, offices in Moscow, Paris and Houston, control centres for the Columbus laboratory in Oberpfaffenhofen, Germany, and for ATV in Toulouse, France, as well as the User Support and Operation Centres (USOCs) located in various participating countries. Moreover, she contributed to the definition of a global cooperation scenario for human exploration through the establishment of ISECG (International Space Exploration Coordination Group), a group of 14 space agencies providing a coordination framework for space exploration as a global endeavour (GES, Global Exploration Strategy). She focused also on innovative technologies which had to be developed to prepare the long term human exploration of the Solar System including robotics and precursor missions on the Moon, Mars and asteroids. On top of the above, main achievements during her tenure were: launch of the ATV-2 with no delay, selection of the six new astronauts of the European Astronauts Corps, conduct of the MARS500 experiment, and relevant selection of two European crew members, First European Commander of the ISS (Frank de Winne), development of the ARV

concept (Automated Re-entry vehicle) which would have allowed Europe today to sit properly at the table for the future of the Moon exploration and beyond, consolidation and increase of the Directorate's programmes budget.

10/2002 - 05/2008 - Rome, Italy

DIRECTOR, OBSERVATION OF THE UNIVERSE – Italian Space Agency

Her main responsibilities encompassed the development of scientific missions and definition of users' requirements and promotion of space activities for the exploration of the Universe. She was responsible of the relations with the scientific community, nationally and worldwide, development of the relevant programmes, selection of research projects, collaboration agreements with national and international entities. With a budget above 35% (was 15% when started in this position) of the total ASI budget (about 350 MEuros at the time), she managed tens of programmes in cooperation with NASA (US), ESA, CNES (F), DLR (G), JAXA (Japan), CNSA (China), Roscosmos (Russia), CSA (Canada), etc. and was responsible to coordinate activities carried out in Rome (ASI-HQ), Matera Space Geodesy Center, ALTEC in Turin, and at the ASI Science Data Center (ASDC) in Frascati, Rome. The national coordination and participation in ESA for the robotic exploration of the Solar System and Human Spaceflight programmes were under her leadership, including the Italian contribution to the NASA/ESA/ASI Cassini-Huygens mission, to the ESA Rosetta mission, in particular thanks to the PHILAE lander, built in partnership between ASI, CNES and DLR, with very important payloads to ESA's Mars and Venus Express missions, and in bilateral with NASA, to FERMI, JUNO, DAWN, MRO, etc.. In particular, the sounding radars both on Mars Express (MARSIS) and on MRO (SHARAD) are the instruments which allowed to find liquid water on Mars. These are just but few examples of the great contribution she provided in this position to the advancement of scientific knowledge in Europe and in the world, and her ability to manage so complex programmes in international settings.

07/2005 - 05/2008 - Paris, France

CHAIR, ESA PROGRAMME BOARD OF HUMANSPACEFLIGHT, MICROGRAVITY AND EXPLORATION (HME)

The ESA Programme Board of Human Spaceflights, Microgravity and Exploration is a subordinate body assisting the ESA Council in dealing with ESA HSF programmes, their implementation, financial aspects and industrial policy. The Chair represents Member States and acts not in her personal or national capacity, but in the interest of the programme, exercising her abilities in bridging Delegations and the ESA Executive. She left the position before the end of the mandate to take up the responsibility as Director of Human Spaceflight in May 2008, also thanks to her great work done as Chair.

01/2000 - 10/2002 - Rome, Italy

ASI SECRETARY GENERAL – Italian Space Agency

As the ASI Secretary General, she supported the ASI President and the ASI Board of Directors in institutional affairs, she coordinated the organisation of the Board of Directors' meetings and strategic meetings of the President, the preparation of documents for approval by the Board of Directors of activities of the Agency, international agreements, contracts, etc., coordinated technical and strategic units within ASI and all ASI committees. In this function, she was also the head of the ASI 'Secretariat General' Unit, and as of 30 May 2000, she also became responsible of the ASI Innovation Unit, for which, based on an Organisational Development Programme, she had to steer change management and had to focus on strategic and management activities and be a champion in communication, scientific, technological, and planning competences for the cultural re-shaping of the Agency. She also took the responsibility of being the Secretary of the ASI Board of Directors, responsible for the supervision of meetings' organisations and preparation of related official minutes, and validation of documents for the final approval by the Board of Directors. Pre-meetings were regularly organised under her responsibility to fully inform the members of the Board on the rationale for the documents presented for approval.

The Board of Potential Participating States to the ESA Programme for Space exploration 'Aurora' allowed the programme to be approved and developed. Her appointment in this role also stemmed from the 'Position paper' which she delivered on behalf of the Italian Delegation at the ESA Council meeting in December 2000, where she indicated the vision and the strategic guidelines for the Aurora programme development, which was convincing enough to get the potential participants MS to appoint her as Chair of this body. After the programme was approved, she was appointed by Italy as the National Delegate to the ESA Aurora Board of Participants (ABP) which had the mandate to take final decisions on the missions and technologies to be developed. Main areas of competence in the Aurora programme were exploration of the solar system and development of innovative enabling technologies.

1988 - 2000 - Rome, Italy

ASI MANAGEMENT ROLES – Italian Space Agency

At the Italian Space Agency, she had several important responsibilities ranging from Earth Observation to science and exploration, automation & robotics, advanced studies, etc., responsible for strategic coordination of Italian Astronauts of the European Astronauts Corps (she supported its creation in 1998), for the newly created ASI Mini-satellites Scientific Missions Programme, for bilateral relations with NASA, in charge of the first Italian astronaut flying as a cosmonaut on the Soyuz Marco Polo mission, for the coordination of the development activities for Node 2 and 3 for the ISS, for the Organisational Development Programme (1998-1999), among other roles and responsibilities. She was part of the small group of people who pioneered the Italian Space Agency, created in June 1988 stemming out from the activities of the National Space Plan (see below), and therefore she had the privilege to help shaping the future of Italy, and Europe, in space.

03/1986 – 06/1988 – Rome, Italy NATIONAL SPACE PLAN – National Research Council (CNR)

The Inter-ministerial Committee for Economic Planning (CIPE) approved the creation of the National Space Plan (PSN) in 1979 with the aim of reinforcing the Italian role in space. Management of PSN was completely under the responsibility of the National Research Council (CNR) and coordinated by the Minister for Education, Research and University. Activities were focusing on telecommunications, remote sensing, propulsion, ground stations (focusing on the Malindi base in Kenya in particular), to which we added a launcher called IRIS (to be launched from the Space Shuttle cargo bay), the Tethered Satellite System, a scientific programme in collaboration with NASA for the development of a 'tethered' satellite deployed from the Shuttle cargo bay, and a telecom satellite, Italsat. She was assigned since the beginning of her tenure to the advanced studies office, and was in charge of creating new opportunities for Italy in terms of new programmes and new partners. In 1987, she created the space automation and robotics office, which then became responsible for the driller on board the PHILAE lander in the Rosetta mission (same technology is used for the driller on board the ESA EXOMARS mission). Also, she developed the SPIDER project as a autonomous spacecraft able to perform Active Debris Removal, but it was probably too early for the global space community to develop such systems and it was stopped at the end of the phase B. This example shows the visionary approach that she always had since the beginning of her career, and how her thinking has always been forward-looking. Several studies were also done combining SPIDER and the Tethered Satellite, which was able to demonstrate the possibility to create energy in space. She was instrumental for the strategic planning of the Italian space activities which was the engine for the creation of the Italian Space Agency in 1988.

EDUCATION AND TRAINING

28/06/1984 - Italy

Master Degree in Astrophysics and Space Physics - Università of Rome 'La Sapienza'

Master Degree in Astrophysics & Space Physics. Dissertation on Active Galactic Nuclei NGC4151 based on the elaboration of space-based data in the ultraviolet bandwidth obtained with the IUE (International Ultraviolet Explorer) satellite, of the European Space Agency.

15/05/2017 – Rome, Italy Honoris Causa Degree, Doctor in International Relations – John Cabot University

10/05/2013 - Vinovo (TO), Italy

Honoris Causa Degree in Environmental Studies - St. John's University

LANGUAGE SKILLS

Mother tongue: ITALIAN, Bilingual: ENGLISH, Good understanding: FRENCH and SPANISH

MAIN HONOURS AND AWARDS

- 2006 Knighted 'Cavaliere Ufficiale al Merito' President of the Italian Republic
- 2010 Silver Medal of the President of the Italian Republic President of the Italian Republic
- 2008 Asteroid 21887 named 'dipippo' International Astronomical Union IAU
- 2018 EURISY's Hubert Curien Award EURISY
- 2018 Brazil's Order of Aeronautical Merit President of Brazil
- 2012 WIA Leadership award Women in Aerospace US
- 2016 AIAA International Cooperation Award AIAA

NETWORKS AND MEMBERSHIPS

2010 - CURRENT

Academician - International Academy of Astronautics - IAA

The International Academy of Astronautics aims at fostering the development of astronautics for peaceful purposes, recognising individuals who have distinguished themselves in space activities. IAA is the most important academy in the world in the field of Space, founded in Stockholm on August 16, 1960 by Dr. Theodore von Karman; She was admitted as corresponding member in 2010, becoming then Academician. She has been appointed member of the IAA Board of Trustees in 2015.

2020 – CURRENT Associate Fellow - The American Institute of Aeronautics and Astronautics - AIAA

2018 – CURRENT Associate - COSPAR

2013 – CURRENT Member - European Professional Women's Network

BOARD EXPERIENCE

2009 - CURRENT

Co-founder WIA Europe (President 2009 - 2016/Honorary President from 2016 onwards)

07/2005 – 05/2008 Chair - ESA Programme Committee for Human SpaceFlight, Microgravity and Exploration

01/2000 - 10/2002 Italian Space Agency Management Board Secretary

1998 – 2005

Member - ESA Programme Committee for Human SpaceFlight, Microgravity and Exploration

04/2013 – CURRENT Member - Ready for Board Women (RFBW)

04/2013 - CURRENT

Member, Global Board Ready Women (GBRW)

ADDITIONAL ROLES AND RESPONSIBILITIES

1989 - 1999

National Delegate, ESA PB for European participation to the International Space Station

In 1989, she was appointed member of the Italian Delegation to the Columbus programme board, which was then renamed Manned Space PB. Main achievements during her tenure: barter agreement with NASA for the launch of the Columbus module, ESA/NASA and ASI/ESA agreements for the development of Node 2 and 3; establishment of the European Astronauts Corps (1998); re-definition of the Space Station Programme after USA/Russia agreement which led to the development of the International Space Station.

2002 - 2008

National Delegate, ESA Science Programme Committee (SPC)

In this position, she was able to support the ESA Scientific Programme not only in selecting, following, extending, and in general supporting the main missions in the course of the years, but also helped to harmonise the national payload contributions to the ESA missions. In fact, most of the payloads of ESA science missions are nationally funded/provided

and it is therefore always a joint effort between national space agencies and ESA itself, which allows the ESA science missions to be a success.

2008 - 2011

European Representative in the Multilateral Coordination Board (MCB)

The Multilateral Coordination Board (MCB) is considered the most important body for the management of the International Space Station as per IGA (InterGovernmental Agreement).

2007 - CURRENT

Founding member ISECG

The International Space Exploration Coordination Group (ISECG) has been set up as an outcome of 'The Global Exploration Strategy: The Framework for Coordination' developed by representatives of 14 space agencies. ISECG Secretariat under her tenure as Director of Human Spaceflight at ESA was located then in ESA/ESTEC, Noordwijk, the Netherlands, within D/HSF at that time. She was instrumental in the creation of this international coordination mechanism when still working at ASI, as Director of the Observation of the Universe, and ISECG stemmed from a proactive cooperation with ESA leading to the organisation of three international workshops for three consecutive years (2005-2007) on space exploration. In 2007, the GES was promulgated and ISECG continues to be the international coordination mechanism among space agencies for space exploration plans.

1994 - CURRENT

Founder, International Lunar Exploration Working Group (ILEWG)

ILEWG was formed in 1994 and consists of representatives from Space Agencies, scientific institutions and industry. Its overall purpose is the implementation of an internationally coordinated programme of robotic and human exploration of the Moon. The ILEWG's charter has there main goals: to develop an international strategy for the exploration of the Moon, to establish a forum and mechanism for sharing information and coordinate activities, and to implement activities in cooperation.

1993 - CURRENT

Founder, International Mars Exploration Working Group (IMEWG)

The International Mars Exploration working group (IMEWG) was created in 1993 with the participation of representatives from space agencies and major institutions participating in space exploration. Its charter has three main goals: to formulate an international strategy for the exploration of Mars, to provide a forum for the coordination of Mars Exploration missions and to examine the possibilities for the next steps beyond currently defined missions.

Faculty

From 01/2019

Faculty at New York University Abu Dhabi

Faculty at New York University Abu Dhabi (NYUAD) with a NYU J-Term 4 credit course on Space Diplomacy.

2009 - 2011

Visiting Faculty at the Elliot School of International Affairs - GWU

Visiting Faculty at the George Washington University (GWU), Elliot School of International Affairs, to teach a 1 credit course on Space Diplomacy and the European system.

Lecturer, Commencement address, Lectio Magistralis

Padua, John Cabot, Rome, LUISS, Cannes, several Chinese universities, Brazil, Chile, CostaRica, Russian Federation, New Zealand, etc.

OTHERS

09/2016 – 09/2020 – NY/Dubai , United States/UAE Member, World Economic Forum (WEF) GLOBAL FUTURE COUNCILS on SPACE TECHNOLOGIES

The World Economic Forum Global Future Councils are the world's foremost interdisciplinary knowledge network dedicated to promoting innovative thinking to shape a sustainable and inclusive future for all. The network convenes more than 800 of the most relevant and knowledgeable leaders from academia, government, business and civil society, grouped in expertise-based, thematic councils. It is an invitation-only community, and members are nominated each time for a one-year period. The Global Future Council on Space Technologies explores critical challenges for the sector such as the need for new governance frameworks and new forms of public-private collaboration, as well as a greater understanding of the sector's socio-economic impact.

2006 - 2009

Member, National Commission for the Promotion of the Italian Culture abroad

The Italian Commission for the Promotion of the Italian Culture abroad was chaired by the Italian Minister for Foreign Affairs and the members were appointed by the Prime Minister of the Italian Government. Her presence was intended to stimulate abroad the interest on the historical heritage and competence of the country on space activities (Italy has been the third country to have a satellite in orbit in 1964 after the Soviet Union and the United States of America, and has been a space fairing country since then) and to also consider more and more STEM topics as part of the cultural heritage of a country, and therefore, of humanity.

07/1998 - 11/1998

Member, NASA Mars Architecture Study Team

The NASA March Architecture Study team was set up by NASA to define the long term architectural programme of Mars Exploration. She was one of the three non American experts, appointed by NASA.

2002

Astronauti, Mursia, 2002, ISBN 978-88-425-3005-3

2007

Dai ghiacci della Terra ai ghiacci dell'Universo, Di Martino, Di Pippo et al., Erga Edizioni 2007, ISBN 978-88-8163-522-1

2015

European Operational Initiative on NEO Hazard Monitoring, S. Di Pippo, E. Perozzi, in Handbook of Cosmic Hazards & Planetary Defence, Springer, 2015, ISBN 978-3-319-03951-0

2017

Global Space Governance: An International Study, Preface by S. Di Pippo, Springer, 2017, ISBN 978-3-319-54364-2

2019

Parola di Astronauta, LAPIS 2019, co-author Ettore Perozzi, ISBN 8878746827

1986 – 2021 Author and co-author of more than 80 publications – please see **attached**

1986 – 2021

Featured in more than 1000 articles and interviews (TV, radio, newspapers, magazines) – few Examples listed in the **attachment**

CONFERENCES, JURIES AND COMMITTEES

Member of awards committees and juries (Bepi Colombo prize 2006 and 2008, Honorary committee HandyCup, Famelab)

TED speaker

Participation to several science festivals

Member of scientific and honorary committees of hundreds of workshops, conferences, congresses, all over the world