Short Curriculum Vitae

Mario Gilberto Lattanzi
Born in the city of Nereto (district of Teramo, Italy)
on April 30, 1959
Italian Nationality

Mario Gilberto Lattanzi was appointed Doctor in Astronomy with honors from the University of Bologna on Dec 19, 1983. The following year he then specialized in Computer Science at the Institute of Mathematics of the same University.

In permanent role as Researcher Astronomer at the Astronomical Observatory of Turin from April 1987, he is promoted to Associate Astronomer in 2003 and works in this capacity until 2017 when, on 4 August 2017, he becomes Head of Research (a role equivalent to Full Astronomer at University Observatories) at the same Observatory, which had become part of the National Institute for Astrophysics (INAF) since 2002.

From 1987 to 1989, he was Post-Doc of the European Space Agency (ESA) at the Space Telescope Science Institute (STScI) in Baltimore (MD, USA); there, he becomes, as ESA Astronomer (until 1996) and then for NASA (until 1998), responsible for the scientific exploitation of the astrometric interferometer (Fine Guidance Sensor - FGS) on board the Hubble Space Telescope (HST).

From 1995 to 2002 he is Co-PI, together with Dr. Barry M. Lasker (STScI), of the project that created the new guide star catalog (GSC-II) for the HST listing about one billion objects down to magnitude V = 20 and distributed over the entire celestial sphere.

In the years 2000-2005 he is member of the Very Large Telescope Interferometer (VLTI) Implementation Committee and, from 2001, of the VLTI Science Demonstration Time group for the European Southern Observatory (ESO).

From 2015 to 2016 he is Visiting Professor at the Shanghai Astronomical Observatory, of the Chinese Academy of Sciences (CAS), with an award from the President of CAS.

Since 2002 he has held, with Dr. Bucciarelli, the course of *Astrometric Methods for Astrophysics* (MAA) for the Master's Degree in Physics at the Physics Department of the University of Turin.

Among the creators of the Gaia mission (1991), from 1997 to 2005 he is part of the Gaia Science Team of ESA, which led to the final approval of the Gaia mission (2002), and therefore to its implementation phase.

Since 2006 he has held, on behalf of the Italian Space Agency (ASI) and INAF, the position of National PI of the Italian participation in the Gaia Mission for the pan-European consortium DPAC (Data Processing and Analysis Consortium), which was entrusted by ESA with the task of processing and analyzing data from the Gaia mission, in orbit since 19/12/2013.
In 2010, with Dr. M. Martino (a Physics laureate with the Italian space science company ALTEC s.p.p.a.), he designed the Italian Data Processing Center, or DPCT, housed in the ALTEC facilities in downtown Turin, of which he is scientific supervisor on behalf of ASI.

He has directed/directs both small and large national and international projects with budgets ranging from a few tens of thousands to several million Euro, as in the case of Gaia. Furthermore, most of these projects have been/ are collaborations with institutions such as ASI, MUR, MAECI in Italy, and, internationally, with CAS, ESA, ESO, STScI / NASA, JPL and with advanced industries (Thales-Alenia Space, Selex-Galileo, BOOSTEC-Fr, ALTEC, …).

Main Research Interests:
i) Direct measurement of the fundamental properties of stars via interferometry and astrometry and their use in astrophysics;
ii) Formation, structure and evolution of the disk and halo components of the Milky Way and their use in the context of Local Cosmology;
iii) Relativistic models and reference systems for the treatment of observations with (sub)micro-arcsecond accuracy; local tests of General Relativity for Cosmology;
iv) Astrometric Gravitational Waves detection and characterization;
v) Research and characterization of extra-solar planets from astrometric and photometric surveys;
vi) Methods and strategies for the construction, exploitation and maintenance over time of large databases in astronomy (Big Data and Legacy Astronomy).

Publications: Lattanzi is author/co-author of over 150 articles in the major international journals of astrophysics and astronomical technology and of over 200 contributions to international conferences (including 21 invited). He is also Co-editor of the volumes: "The Astrophysics of Planetary Systems", by Cambridge Univ. Press (2011), and "QSO astrophysics, fundamental physics, and astrometric cosmology in the Gaia era", vol. 83 Mem. S.A.It (2012).

It is possible to retrieve the updated list of MGL's publications by utilizing the ORCID identification code: 0000-0003-0429-7748 .

Pino Torinese, May 6, 2021