

European curriculum vitae

Personal information

Surname(s) / First name(s)

Address(es)

Telephones

Fax

e-mail

Nationality

Date of birth

Gender

MARCELLI Augusto

Istituto Nazionale di Fisica Nucleare, Laboratori Nazionali di Frascati,
00044 Frascati (Roma) Italy

+39.06 94032737

marcelli@lnf.infn.it

Italian

xx/yy/1959

Male



Title (Education)

Graduate in Physics

Occupational field

Physics, Scientific Instrumentation, Spectroscopy & Imaging, Research Infrastructure

Work experience

Present position

Name and address of employer

Type of business or sector

Institutional website

Additional details

Primo Ricercatore INFN (since March 2000)

Istituto Nazionale di Fisica Nucleare, Laboratori Nazionali di Frascati,
00044 Frascati (Roma) Italy

Physics, Scientific Instrumentation, Spectroscopy & Imaging, Environmental science, Research Infrastructure

<http://www.lnf.infn.it>

Augusto Marcelli was involved in synchrotron radiation (SR) researches since his degree in Physics in 1984. He was appointed to a permanent position as a staff scientist at the INFN LNF in 1985 and in the 90's was leader of one of the first European team working in the Japanese SR facilities of Tristan and PF where realized some of the early SR x-ray circular polarized experiments. In particular, the first x-ray circular dichroism experiments able to monitor the dynamics of magnetic transitions (Europhys. Lett. 28, 1994, 135-141).

From 1990 to 1996 he was a Contract Professor of Physics at Camerino University, but lectured also in the Universities of Roma I, Roma III and Salerno. Since 1997 and up to 2008 he was member of the International Scientific Committee of the X-Ray and Inner-Shell Conference Series and in 2002 he was co-Chair of the 19th International Conference of X-ray and Inner shell Process held in Roma.

He proposed and built in the DAΦNE-Light laboratory the first Italian Infrared SR beamline and was the scientist responsible for its operation till 2006. From 2005 to 2006 he was also responsible of the UV beamline at DAΦNE.

He opened new frontiers in the mineralogical analysis of extremely small amount of dust, gathering unique information by applying synchrotron-radiation spectroscopic methods such as Total-Reflection X-Ray Fluorescence (TXRF) and X-ray Absorption Near Edge Structure (XANES) techniques, complementary to classical mineralogy. He demonstrated that the characterization of airborne particle components trapped inside deep ice cores, precious proxy for assessing environmental and atmospheric circulation variability and regional-to-global climate change at different time scales, is possible concentration down to the ppb range.

For the INFN he was responsible of projects approved by the 5th National Committee and within the framework of the X Protocol of Scientific and Technological Cooperation between Italy and China, Coordinator of projects devoted to synchrotron radiation applications. In the framework of International Cooperation Agreements of the Foreign Minister he was coordinator of a bilateral program between Italy and Argentina for biomedical researches (Non conventional analysis with synchrotron radiation of biological samples for biomedical applications - 2006-08), coordinator of the project Imaging and spectromicroscopy with synchrotron radiation within the framework of the XII Protocol of Scientific and Technological Cooperation between Italy and China (2007-09) and coordinator of the project of Great Relevance Investigation of local structure and magnetism of Co nano-structures in the framework of the bilateral agreement between Italy and India of the MAECI (2012-2015).

From 2001 he is consultant of the IHEP (Institute of High Energy Physics - China) for synchrotron radiation activities and in 2011 has been the first Italian Visiting Physics Professor of CAS.

He was coordinator of the project 3-Dimensional Graphene: Applications in Catalysis, Photoacoustics

and Plasmonics within the framework of the Italian-Chinese Collaborative Research Projects under the MoU between the MAECI and the National Natural Science Foundation of China (2018-2020). During his career he supervised several students and was sponsor of Italian and foreign fellowships. For two years (1999-2000) during the Y2K he has been responsible of the Computing and Network Data System of the LNF laboratory of the INFN and Member of the INFN Board for New Data Technologies.

Since 1984, he performed in cooperation with national and international teams several experiments approved by the Scientific Panels of the synchrotron radiation facilities of BESSY, BSRF, Diamond, NSRL, KEK, LURE, SSRL, SRS, UVSOR and ESRF.

In the European framework he has been the principal investigator for INFN of two networks and coordinators of the DASIM (Diagnostic Applications of Synchrotron Infrared Micro-spectroscopy) initiative involving all European SR IR microscopy facilities. In particular, within this project he has been coordinator of a node of this Specific Support Action. The node included physicists and chemists in an established partnerships that involved all synchrotron infrared microscopy facilities operational or under construction in Europe: ANKA, BESSY, DAFNE, ELETTRA, ESRF, LURE, SLS, SOLEIL, SRS, DIAMOND and MAXLAB.

Position held (Dates)
Main activities

Research Scientist (december 1985 - present)

Progetto Utilizzazione Luce di Sincrotrone (PULS) 1986-1993

Progetto Wiggler Adone (PWA) 1993-1998

DAFNE-Light (1998-2006)

Scientific expert on bilateral policies and activities for the internationalization of S&T research at the DGSP of the Italian Ministry of Foreign Affairs and International Cooperation (01/2019-07/2022).

Name and address of employers
Type of business or sector

INFN – Laboratori Nazionali di Frascati (1985 – present)

Physics, Research Infrastructure

Education and training

Dates

June 1984

Title of qualification awarded

Physics degree

Principal subjects

Physics

Name and type of organisation
providing education and training

University *Sapienza* Rome

RESEARCH ACTIVITIES

Research sectors

Physics; Electron Spectroscopies; Scientific Instrumentation; Synchrotron Radiation and FEL; Imaging and Spectroscopy; Research Infrastructures.

ERC Classification: Physical Sciences and engineering (PE)

Electronic properties of materials, surfaces, interfaces, nanostructures (PE3_4); Spectroscopic and spectrometric techniques (PE4_2)

Recent Scientific Activities.

His research areas include: correlation phenomena in x-ray absorption spectroscopy, multiple scattering theory applied to core level x-ray absorption spectra of solid and liquid systems, circular magnetic x-ray dichroism in intermetallic rare earth compounds, soft x-ray absorption of light elements of geophysical interest and under extreme conditions, FTIR micro-spectroscopy and IR imaging applied to proteins, cells and tissues, time resolved experiments in the IR domain and synchrotron radiation instrumentation, in particular IR and x-ray optics, fast infrared detectors and RF accelerator components.

With a H-index = 46 [google scholar certified] (>550 manuscripts and >8500 citations), since 2013 Marcelli is present in the list of the Top Italian Scientists (TIS) of the Via-academy.org (www.topitalianscientists.org). In 2013 he also earned the National Habilitation to Full Professor for Sector 02/B1 [*Experimental Condensed Matter Physics*];

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publons.com/a/831827/

Personal skills and competences

Mother tongue(s)

Italian

Other language(s)

English

Organisational skills and competences

Coordination of Research Groups in an international environment.

He has proven organizational and management abilities witnessed in particular by the capability in the chairmanship of several conferences and workshops and the coordination of national and international projects. For the INFN he was responsible of projects approved by the 5th National Committee and within the framework of the X Protocol of Scientific and Technological Cooperation between Italy and China, Coordinator of projects devoted to synchrotron radiation applications. In the framework of International Cooperation Agreements of the Foreign Minister he was coordinator of a bilateral program between Italy and Argentina for biomedical researches (*Non conventional analysis with synchrotron radiation of biological samples for biomedical applications* - 2006-08) and coordinator of the project *Imaging and spectromicroscopy with synchrotron radiation* within the framework of the XII Protocol of Scientific and Technological Cooperation between Italy and China (2007-09). From 2001 he is consultant of the IHEP (Institute of High Energy Physics - China) for synchrotron radiation activities and in 2011 has been the first Italian Visiting Physics Professor of the Chinese Academy of Science. At present he is one of the High-end Foreign Experts of the State Administration of Foreign Experts Affairs (SAFEA) of the P.R. of China

In the European framework he has been the principal investigator for INFN of two networks and coordinators of the DASIM (Diagnostic Applications of Synchrotron Infrared Micro-spectroscopy) initiative involving all European SR IR microscopy facilities.

From January 2019 to July 2022 he was appointed as scientific expert on bilateral policies and activities for the internationalization of S&T research at the DGSP of the Italian Ministry of Foreign Affairs and International Cooperation.

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INFORMATIVA E CONSENSO**

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