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Born: 10 marzo 1956 a Milano

Civil status: married, three children

Nationality: Italian

Permanent legal residence: Viale Coni Zugna 37, 20144 Milano (Italy)

Curriculum Vitae

- 2018** -*Chair* of **ESFRI**, elected for extension of mandate
- 2017** -*Chair Group of Senior Officials* of **G8+5** on Global Research Infrastructures – Napoli
-*Member* of “gruppo (informale) di elaborazione del programma dell’Università degli Studi di Milano per il Post-EXPO”; proponente “Macchina di Luce” (progetto MARIX)
-*Member* of EGI (European Grid Initiative) Steering Board
- 2016** -*Chair* of **ESFRI** European Strategy Forum for Research Infrastructures
-*Member* of **Steering Board of ERAC** (European Research Area Comm.)
- 2015** -elected *Chair* of **ESFRI**; PI of **NFFA-Europe H2020 RIA facility (20 Partners, 2015-2019)**
- 2014** -*Chair GSO* on Global Research Infrastructures – Roma

-*Expert evaluator* for National Roadmap of Bulgaria for Research Infrastructure
-*Coordinatore Nazionale PRIN 2012 - NOXSS* (X-ray Single Shots of Nano Objects) un approccio sperimentale e teorico integrato per la caratterizzazione strutturale di nano e micro oggetti (clusters, nanocristalli, biomolecole, virus, liposomi) utilizzando gli impulsi X ultrabrevi ed ultrabrillanti delle sorgenti free electron laser europee.
- 2013** -*Vice-Chair* of **ESFRI**
-*Chair* of the Physics Sciences and Engineering Strategy Work group of **ESFRI**
-*Member* of Comité Scientifique of **Labex NanoSaclay** (Univ. Paris-Saclay) on “Technological Transfer”
-*Chair* of Expert Group on Indicators of Pan-European Relevance of Research Infrastructures
- 2012** -*Member* of the **Special Committee for the Future of the European Synchrotron Radiation Facility ESRF** (2012)
-*Principal Investigator –Coordinator* of FP7 project EXSTASY-EXperimental Station for the Analysis of the Spin Dynamics, Grant agreement N.PIIF-GA-2012-326641
- 2011** -*Full Professor of Physics of Matter* – FIS03, Università degli Studi di Milano
- 2010** -*Expert evaluator* for Ministry of Education, Youth and Sports of Czech Republic for Research Infrastructure

- 2009** -*Delegate* of Italy in the **ERIC Management Board Committee** (until 2016)
-*Member* of “Coordinamento degli **Enti di Ricerca operanti nel FVG**” and related Scientific Council
- 2008** -*Member* of Consiglio di Amministrazione of **SISSA** Scuola Italiana Superiore Studi Avanzati (until 2015) representing MIUR
-*Member* of MIUR committee for the Italian Roadmap of Infrastructures of pan-European interest (until 2010)
-*Coordinator FP7 Design Study NFFA* (Nano Foundries and Fine Analysis) (until 2010)
-*Coordinator UniMoRE Unit of PRIN 2008* Auto-organizzazione di ftalocianine su substrati con nanostrutturazione magnetica. Analisi dell'ordine molecolare, degli stati elettronici e dell'ordine magnetico. (until 2011)
- 2007** -*Member* of the Italian delegation of the **FP7-Capacities Research Infrastructure Programme Committee** (2007-2013)
- 2005** -*Member* del Consiglio di Amministrazione della **Sincrotrone Trieste S.c.p.A.** (until 2010)

- 2004 -Member of Proposal Review Panel on Hard Condensed Matter, **ESRF** until 2010
- 2002 -Member of Board (Consiglio di Amministrazione) of **AREA-SCIENCE Park** (until 2006)
- Member of “Commissione Ricadure Industriali” of **AREA Science Park** (until 2006)
- 2001 -Member of **Giunta Esecutiva (Executive Board) of INFN** (Istituto Nazionale di Fisica della Materia) until 2005 with responsibility of **Large Scale Facilities** and **Politica del Personale** (first implementation of Tenure Track positions in Italy);
- Member of **Scientific Advisory Committee (SAC) of the European Synchrotron Radiation Facility ESRF** Grenoble (2001-2011)
- Member of Proposal Review Panel on Surfaces and Interfaces, **ESRF** until 2003
- 2000 -Member of **Consiglio Direttivo (Directors Board) dell'INFN** (until 2005)
- Director of **Laboratorio Nazionale TASC-INFN** di Trieste (now IOM-CNR) until 2009 (on leave from Università di Modena in 2000-2006)
- Coordinator UniMo Unit of **PRIN 2000** (Costruzione di un ottica elettronica e del sistema di acquisizione per la microscopia elettronica a scansione con analisi di polarizzazione (SEMPA). Microscopia di nanostrutture magnetiche).
- 1997 -Creator and Coordinator of **APE group** with INFN and international members
- 1996 -Principal Investigator –Coordinator of the APE – INFN beamline construction grant on the Elettra storage ring at Trieste
- 1994 -Associate Professor in General Physics -**FIS01**, Università di Modena e Reggio Emilia, (until 2011)
- 1989 -Principal Investigator –Coordinator grant of the **Fond National Suisse** pour la recherche for Research on Dynamics of Magnetization reversal at the Surface
- 1988 -Oberassistent 50% **ETH-Zürich**, Laboratorium für Festkörperphysik, Zürich, CH (until 1995)
- 1987 -Principal Investigator -Coordinator Grant **CEE ST2J-0333-C of SCIENCE** (twinning LURE-CNRS-Uni. Modena)
- 1986 -Member of Comité Scientifique des Surfaces **LURE** (until 1992)
- 1985 -Chargé de Recherche Iere Classe, **CNRS – LURE** (Laboratoire pour l'Utilisation du Rayonnement Electromagnétique, Orsay, France (until 1995)
- Coordinator **SU7 group** with 6-10 members (CNRS, FP4, ETH-Zürich) until 1996
- 1984 -Chercheur Associé au **CNRS** (Poste Rouge), Laboratoire pour l'Utilisation du Rayonnement Electromagnétique **LURE**, Orsay, France 1984-1985;
- Visiting Scholar at Stanford "**Stanford Synchrotron Radiation Laboratory**" **SSRL**,
- 1983 -Research Contract with **AT&T Bell Laboratories**, Murray Hill, New Jersey
- Collaborateur Scientifique Commissariat à l'Energie Atomique - **CEA**, Saclay, France (until 1984)
- Doctorat d'Etat es Sciences Physiques, Université Pierre et Marie Curie, Paris**
- 1982 -Senior Research Associate at **Stanford University** (Electrical Engineering Department) (until 1983)
- 1981 -**Laurea in Nuclear Engineering** (Materials and Electronic) **Politecnico di Milano**, Thesis photoelectron spectroscopy on surfaces.
- 1980 -Research Associate at **Stanford University** (Electrical Engineering Department), Stanford, California (until 1982)
- 1974 -Maturità scientifica, Milano
- Language skills: Italian (mother tongue), English fluent, French fluent

Giorgio Rossi has authored over 210 papers in international refereed journals and chapters in books. Overall citations range over 4572 all and 992 in the last 5 years with a total h-factor 37 and 17 in the last 5 years, from Google Scholar, that proved to be the most robust system filtering homonyms (many).

Professional profile: Research Associate at EE Department of **Stanford University** (SU, California, **1980-1982**); Laurea in Nuclear Engineering, Politecnico di Milano 1981; Senior Research Associate at EE SU (**1982-1983**); Post.Doc. AT&T, Bell Labs.(1983); **Collaborateur Commissariat à l'Énergie Atomique CEA**, SPAS Saclay, France (1984); Poste Rouge **Chercheur Associé au CNRS**, LURE, Orsay, France 1984-1985; **Doctorat d'Etat es Sciences Physiques** (1984, Université Pierre et Marie Curie, Paris); Visiting Scholar at SSRL, Stanford, California (1984); **Chargé de Recherche 1ere Classe CNRS**, LURE, Orsay, France (**1985-1995**); **Oberassistent 50% ETH-Zürich**, Laboratorium für Festkörperphysik, CH (**1988-1996**); **Associate Professor of General Physics - FIS-01**- Dipartimento di Fisica UniMO-UniMORE (**1994-2011**); **Director of Laboratorio Nazionale TASC – INFN**, Trieste (**2000-2009**); Elected Member of **Executive Board of INFN (2000-2004)**; Member of the **Italian Delegation to FP7-Research Infrastructures** (2007-2014); Italian Delegate to **ERIC Management Board** (2009, resigned in 2016); Member –MIUR- of the **Governing Board of SISSA** international school in Trieste (**2008-2015**); **Full professor of Physics of Matter -FIS-03-** at the University of Milano (since 2011). Teaching courses: Thermodynamics (undergraduate); Surface Physics (graduate); Member of Dottorato di Ricerca in Fisica e Astrofisica, Università di Milano.

Coordination of research groups and projects: **SU7 group** for surface spectroscopy at CNRS-LURE (1987-1994); ETH-Z group on surface magnetometry with synchrotron radiation (1988-1996); **INFN-APE group** for construction of two beamlines and research in synchrotron radiation spectroscopy on surfaces and nanostructured matter (1997-present); **NFFA-Trieste group** for development of an international facility for nanoscience and fine analysis (2011-present); **NFFA-Sprint group** for time resolved spectroscopy (2015-present);

Responsibilities in international organizations for science: *Member of Scientific Advisory Committee di ESRF* Grenoble (2001-2011); *Italian Delegate to ESFRI* since 2009; *Italian Delegate to ERIC Management Board Committee* (2009-2016); *Member of Special Committee for the Future of ESRF* (2012); *Member of Italian Delegation to FP7-Research Infrastructures* (2007-2014); *Italian Delegate to ERIC Management Board* (2009-2016); *Member –MIUR- of the Governing Board of SISSA* international school in Trieste (2008-2015); *Member of the Governing Board of Elettra-Sincrotrone Trieste S.c.p.A* (2008-2014); *Member of Scientific Committee of Labex NanoSaclay* (Univ. Paris-Saclay) for “Technological Transfer” (since 2013); *Senior Official of Itlay in GSO of G8+5* on Global Research Infrastructures, since 2011 - *Chair of GSO in 2014*; *Vice-Chair (elected) of ESFRI* (2013-2016); *Chair elected of ESFRI* in 2015 (2-years mandate); *Chair of ESFRI (2016- 2018)*; *Member of Steering Board di ERAC* (European Research Area Committee) since 2016; *Chair of GSO in 2017*; *extension of mandate as Chair of ESFRI* till end of 2018;

Giorgio Rossi initiated his thesis work at the Politecnico di Milano in 1979. In 1980 he became research associate at Stanford University (SU, California, US) in the group of W.E. Spicer and with I. Lindau. Until 1984 GR carried out pioneering work on the solid state effects on photoionization cross sections (Cooper minimum) by using synchrotron radiation (SR). In parallel to the collaborative (SU-Politecnico) programme on metal semiconductor interfaces GR developed own research directions and collaborations for the applications of XAS/SEXAFS to surfaces and metal/semiconductor interfaces (J.Stohr - EXXON research; P..Citrin - Bell Laboratories). In 1984 GR was at CEA-Saclay (J. Lecante -SPAS) to set up the first hard-X SEXAFS experimental station in Europe. Experiments led to the evidence of RCP aggregation in ultrathin quenched pure amorphous transition metals. GR obtained the Doctorat d'Etat es Sciences Physiques by the Pierre et Marie Curie University in 1985 and became permanent senior researcher of CNRS, at LURE under the direction of Y. Petroff. GR developed surface spectroscopy using the UV and X-ray sources obtaining novel results in resonant photoemission of rare earths and on the bonding structure at metal/semiconductor interfaces. GR set-up an undulator beamline for soft-X ray spectroscopy (SU7) on the new SuperACO storage ring in 1987. He was PI of a SCIENCE European Grant that supported the first own research team that developed soft X-ray spectroscopy of interfaces and SEXAFS. Between 1988 and 1996, with the agreement of CNRS, GR took a 50% Oberassistent position at ETH-Zürich, Laboratorium für Festkörperphysik with the late H.C. Siegmann to develop surface magnetometry with Mott polarimetry and pulsed (500 ps) synchrotron radiation at LURE. GR and his group, supported by the Swiss National Fund, pioneered the Linear Magnetic Dichroism in the Angular Distribution (LMDAD) of photoelectrons from ferromagnetic surfaces and its interpretation. SP, LMDAD and photoelectron diffraction, were combined for quantitative surface magnetometry leading to the first measure of the surface spin moment of Fe(100) surface atoms and the first SR time resolved magnetization reversal by SP measurements. In 1994 GR became Associate Professor of General Physics (FIS01) and joined the Physics Department of the University of Modena. GR was PI of a INFN grant for the design and construction of the APE beamline on the Elettra storage ring in Trieste: the new group based in Trieste performed the design and construction of a zig-zag twin Apple-Two undulator sources and beamlines (Advanced Photoelectric-effect Experiments) in 1996-1999 and realized two unique sources of variable polarization synchrotron radiation in the 10-100 eV range and in the 150-1500 eV range with UHV interconnected spectrometers and sample preparation facilities. The APE project pioneered several technical solutions (a-periodic undulators, vectorial spin-detectors) that have spread to other synchrotron radiation labs worldwide. High resolution 3D tomography of the Fermi surface was implemented: the Fermi surface of Be and the spill-over from bulk to surface states attracted international users of the APE beamline as well as the study to disentangle true magnetic dichroism from matrix element effects from Ni(111) and Cu(111). GR and his group exploited XMCD, core photoemission and Spin Polarization with a vectorial Mott polarimeter to address simultaneously bulk (XMCD and Kerr magneto-optics) and surface magnetism (SP yield and photoemission dichroism). In 2000 GR was elected by INFN to be Director of the Laboratorio Nazionale TASC at Trieste and member of the Executive Board of INFN under President F. Toigo with responsibility of Large Scale Facility and personnel policies. GR reoriented TASC to nanoscience supporting own laboratories and the construction of 5 beamlines on Elettra, and more at ESRF and ILL and reaching a staff of 50. TASC coordinated several EC grants, the FP7 Design Study for a Nano-Foundry and Fine-Analysis, followed by the ongoing H2020 NFFA-Europe Integrating

Action.(www.NFFA.eu) In 2004 GR developed the concept of the Istituto Officina dei Materiali – IOM that eventually became an Institute of CNR in 2009. In 2011 GR was called as full professor of Physics of Matter (FIS03) by the Università degli Studi di Milano joining the Physics Department. GR is PI since 2008 of the NFFA group in Trieste, (www.Trieste.NFFA.eu) that expand methods and facilities for advanced research on quantum materials with a 4x oversubscription by international users. For example Bi₂Se₃ was grown in situ and the spin polarization of the Dirac cone states was measured with high energy/momentum resolution. Since 2015 NFFA-Trieste has yielded over 40 high impact publications by the NFFA group and/or by users. GR started in 2015 the project for a novel laser-HHG beamline concept for time resolved ARPES and SP-yield studies in pump-probe mode in the 10E-14 s scale, building on technical developments carried out under FP7 (EXSTASY) and PIK (ULTRASPIN) grants. GR and his group study the electronic configuration of correlated materials by surface and bulk photoemission, time resolved bulk photoemission, time resolved X-ray diffraction from clusters also by using SR and FEL sources worldwide (Europe, Japan, US). Since 2000 GR has undertaken, without discontinuity of his research and teaching activities, also an intense activity in science policy and organization at national, European and global level. GR was elected member of the Executive Board of ESFRI and then Chair of the Physical Science and Engineering Strategy Working Group of ESFRI (European Strategy Forum of Research Infrastructure), Vice Chair of ESFRI and eventually Chair of ESFRI realizing the roadmap ESFRI 2016 and the next ESFRI 2018. GR has created the series of ESFRI Scripta books that address strategic issues of European Science related with Research Infrastructures. GR is the senior official for Italy of the GSO, created by G8+5 on Global Research Infrastructures (GRI). GR was twice Chair of the GSO, in 2014 and in 2017, supporting global projects involving INFN, CNR, INGV, Anton Dohrn. GR is a lecturer of undergraduate and graduate physics, general physics, magnetic properties of matter and surface science since 1995. He has been lecturing at summer schools on synchrotron radiation methods. He has tutored and directed PhD thesis and Laurea (Master) thesis work of dozens of young scientists since 1985, several of them became professional scientists or university professors. The impact of GR's work on surface physics and spectroscopy is twofold: 1) instrumentation development and combination of facilities to support advanced, controlled, surface science research by his group and by international users; 2) methodological effort to address surface and interface magnetism and its dynamical aspects, phase transitions at surfaces and interface properties including hybrid organic/inorganic systems.

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1.a - National and international grants (as principal investigator)

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1987 - 1989 PI (coordinator @) Grant CEE ST2J-0333-C of SCIENCE (twinning LURE-CNRS-Uni. Modena)

1989 – 1992 PI 3-year grant of the Fond National Suisse pour la recherche for Research on Dynamics of Magnetization reversal at the Surface (CHF ???)

1996 PI (coordinator) of the APE – INFM beamline construction grant on the Elettra storage ring at Trieste. INFM grant 2.5 M€ + Elettra grant .6 M€ + ETH-Z (.6 M€ in kind); Uni. Zh. (.1M€ in kind) and CNRS (in labour).

2000 PI Unit Modena PRIN 2000: MM02578118_003 Construction electron optics for SEMPA (PI nazionale F. Parmigiani – Uni. Catt. Brescia)

2004 PI Unit Modena PRIN 2004: Fine Analysis, Modelling, C Analisi Fine, Modellizzazione e Calcolo di Interfacce Organiche/Inorganiche (PI nazionale M.G. Betti – La Sapienza, Roma)

2008 PI U

PI expression of interest EC “DYNAMAG” then merged into “NANOMAG”

PI (Coordinator) of Design Study FP7 NFFA (Nano Foundries and Fine Analysis) (Grant Agreement No 212348, Collaborative project, 1.8 M€, 2008-2010) WEB: <http://nffa.tasc.infm.it> Partners: STFC Oxford UK, CNM-CSIC Barcellona E, OEAW Graz A, Paul Sherrer Institute PSI, Villigen CH.

PI project for MIUR-Grandi infrastrutture di ricerca nazionali di livello paneuropeo: Codice: ROAD07XXXX - Titolo: Nanoscience Foundries and Fine Analysis Italian Headquarters Centre

PI project for MIUR-Grandi infrastrutture di ricerca nazionali di livello paneuropeo: Codice: ROAD07BS44 - Titolo: X-FEL Italian Instrumentation

PI project for MIUR-Grandi infrastrutture di ricerca nazionali di livello paneuropeo: Codice: ROAD07XAM4 - Titolo: European Synchrotron Radiation Facility – UPGRADE PROGRAMME

PI FPT project EXSTASY-EXperimental Station for the Analysis of the Spin Dynamics, Grant agreement N.PIIF-GA-2012-326641

PI national coordinator PRIN 2012 NOXSS, Grant 2012Z3N9R9 (0.454 M€), (2014-2017)

PI H2020 (Coordinator) NFFA-Europe RIA Grant. H2020+CH = 11.7 M€, 4 years, (2016-2019) Research Infrastructure Nano-Foundry and Fine Analysis, 20 EU + CH members.

PI Work-Package WP2-ESFRI Roadmap, Project Str-ESFRI H2020 SA, (PI STFC, UK) Grant fraction to Unimi XXX M€ (2016-2019)

1.b - National and international acknowledgments

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National - Elected Director of National Laboratory TASC of INFM in 2000, re-elected 2003, extended until 2009

National - Elected Member of Executive Board INFM 2000-2004

International - Nominated Member Scientific Advisory Committee ESRF 2001-2010, and of Review Committee SI (Surfaces and

Interfaces)

International - Nominated Member of Review Committee HE (hard condensed matter-electronic structure) of European Synchrotron Radiation Facility (ESRF) (2003-2010)

European - Elected member Executive Board ESFRI (200

European - Elected chair ESFRI PSE

European - Elected Vice President ESFRI

European - Elected Chair of ESFRI 2015 + elected for mandate extension 2018

International - GSO Chair 2014

International - GSO Chair 2017

European - Nominated Member of Italian Delegation to FP7 Research Infrastructure, 2007-2014

European - Nominated Italian Delegate to ERIC Management Board (European Research Infrastructure Consortium) (2009, resigned in 2016)

European – Member of ERAC Steering Board

European – Member of EGI advisory steering board