

CV of Mauro Migliorati

I obtained the PhD in Electromagnetism at SAPIENZA - University of Rome in 1995. I worked at the Istituto Nazionale di Fisica Nucleare - Laboratori Nazionali di Frascati (INFN - LNF), Italy, in the particle accelerator field (DAFNE project) from 1992 to 1997, after which I became researcher at the Faculty of Engineering of "La Sapienza" in Experimental Physics. In 2015 I became Associate Professor in Applied Physics. My research activity regards the accelerator physics and in particular the beam dynamics and the collective effects produced by electromagnetic fields.

I am author of several simulation codes able to study linear and non linear beam dynamics with the inclusion of collective effects, with which I have studied single and multi-bunch instabilities of different particle accelerators.

I have collaborations with the Accelerator Beam Physics group of CERN on beam instabilities in LHC and its injectors. I am coordinator of a collaboration agreement between CERN, Beams Department and SBAI Department for the upgrade of the LHC (HI LUMI LHC) and for the study of collective effects in a new project, the Future Circular Collider.

I have contributed to the TDR of SPARC photo-injector and I have participated to the SPARC commissioning and to the SPARX project.

I am co-author of about 100 papers in international referred journals and of more than 140 contributions to international conferences in the field of particle accelerators.

March – July 2016, 2017, 2018: Awarded as Project Associate at CERN Geneva, CH, for working on the upgrade of the LHC injectors

Feb - Jul 2012, 2013, 2014: Awarded as Scientific Associate by CERN, Geneva, CH, for working on the upgrade of the LHC injectors

From Feb 2014: Member of the JUAS (Joint University Accelerator School) Advisory Board. JUAS is a school of accelerator physics, technology and applications organized by ESI (European Scientific Institute) and supported by 15 partners European Universities under the patronage of CERN

Member of the Advisory Board of IPAC 2014 and 2017 (International Particle Accelerator Conference)

From 2012: Member of the Academic Board of the PhD in Accelerator Physics of the University of Rome LA SAPIENZA

Member of PhD commissions as examiner on particle accelerators in France and Switzerland Universities.

International teaching experience - from 2010 on: course on Space charge and instabilities at the JUAS (Joint University Accelerator School)

Referee of: Physical Review Letters, Physical Review Special Topics - Accelerators and Beams, European Physical Letters

Supervisor of PhD theses in Accelerator Physics and of theses in Aerospace Engineering.