PERSONAL INFORMATION

Alessandro Cianchi

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Gender: Male *Date of birth*: 27/09/1970 *Nationality*: Italian

Enterprise	University	EPR
☐ Management Level	☐ Full professor	☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist
☐ Mid-Management Level	☒ Associate Professor	☐ Level III Researcher and Technologist
☐ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

[15/04/2021 – Current] **Associate Professor**

University of Rome Tor Vergata

City: Roma
Country: Italy

Main activities and responsibilities:
Responsible of Working Package 8 Diagnostics in European Project CompactLight.
Responsible of beam and photon diagnostics in the project EuPRAXIA@SPARC_LAB at INFN-LNF.
Course of Physics of Particle Accelerators at Physics Department University of Rome Tor Vergata
Course of General Physics I & II at Management Engineering University of Rome Tor Vergata
Member of the Academic Senate at the University of Rome Tor Vergata
Board member of Ph.D. in Physics
Member of the scientific committee of: 2022 IBIC (International Beam Instrumentation Workshop) Krakow (Poland)
Editorial Board member of Journal Instruments

[17/04/2008 – 14/04/2021] **Assistant Professor**

University of Rome Tor Vergata
City: Roma
Country: Italy
Main activities and responsibilities:
Principal investigator experiment ODRI2D, collaboration INFN-DESY for the use of the Optical diffraction radiation as not intercepting diagnostic for high brightness electron beam.
Responsible for electron beam measurements at SPARC-LAB at INFN-LNF.
Working packager leader WP15 European Project EuPRAXIA.
Scientific responsible of Regione Lazio project TECNOMUSE, for the use of the muon scattering as diagnostic tool for port containers.
Local coordinator for INFN-Tor Vergata of the experiment SL_COMB
Chair of the Scientific Program Committee of 4th European Advanced Accelerator Concepts 2019 (Isola d'Elba, Italy)
Member of the scientific committee of: 2016 IBIC (international Beam Instrumentation

Workshop)
Barcelona (Spain), 2016 Physics and Applications of High Brightness Beams, Havana (Cuba), 2014 6th microbunching instability workshop, Trieste (Italy), 2013 1st European Advanced Accelerator Concept, Isola d'Elba, Italy
Course of Particle Accelerator Physics (2011-ongoing) for Physic, General Physics I & II (2013-ongoing) for Management Engineering, Computing (2008-2010) for Physics of the atmosphere.
Assistant professor of electronics laboratory (2007-2014)

[01/01/2005 – 16/04/2008] **Researcher** INFN
City: Roma
Country: Italy
Main activities and responsibilities:
Design and installation of electron beam diagnostics at TTF2/FLASH accelerator in DESY (Hamburg)
Electron beam measurement responsible at SPARC at INFN-LNF Frascati
Principal investigator experiment ODRI, collaboration INFN-DESY for the measurement of the beam transverse parameters by means of diffraction radiation.

[23/12/2002 – 23/12/2004] **Research fellow**
University of Rome Tor Vergata
City: Roma
Country: Italy
Main activities and responsibilities:
Experimental activity in deposition of thin Niobium film over copper
In Radio-frequency accelerator structures.

[15/05/1998 – 04/03/1999] **INFN research fellow**
INFN
City: Frascati
Country: Italy
Main activities and responsibilities:
Setup and measurement of electron beam parameters at TTF1 injector at Desy (Hamburg)

[19/06/1997 – 17/12/1997] **Guest Scientific Researcher**
Fermi National Accelerator Laboratory
City: Batavia
Country: United States
Main activities and responsibilities:
Installation and commissioning of electron beam diagnostics time resolved for A0-photoinjector

EDUCATION AND TRAINING

[1999 – 2001] **Ph.D. in Physics**
University of Rome tor Vergata
Address: Via della ricerca scientifica 1, 00133, Roma, Italy
Field(s) of study: Natural sciences, mathematics and statistics
Final grade: Ph.D.
Thesis title: “Radiazione di diffrazione e suo utilizzo come sistema di diagnostica non intercettante per

fasci intensi di particelle"
Advisors: Prof. Sergio Tazzari, Dott. Michele Castellano

[1997] **Master degree in Physics**
University of Rome La Sapienza
Address: Piazzale aldo Moro 5, 00185, Rome, Italy
Field(s) of study: Natural sciences, mathematics and statistics
Thesis title: "Misure di stabilità lungo il macroimpulso del fascio di TTF (Tesla Test Facility) realizzate con la radiazione di transizione in banda ottica"
Advisors: Prof. Carlo Bernardini, Dott. Michele Castellano

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s) English
LISTENING C1 READING C1 WRITING C1
SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

Digital skills Microsoft Word | Microsoft Excel | Microsoft Powerpoint | Zoom | Microsoft Office | Skype | Programming Languages C C++ Python Matlab | Wolfram Mathematica (since 1998) | Windows Linux OS | Gmail | Internet user | Facebook | Instagram | Outlook | Google Drive | Google Docs

ADDITIONAL INFORMATION

Publications More than 100 papers on peer-reviewed Journal
4725 citations (source: Scopus)
h-index: 30 (source: Scopus)
Referee of: Physical Review Letters, Communication Physics, Physical Review Applied, Physical Review A, Physical Review Accelerators and Beams, Scientific Reports, Journal of Instrumentation, Instruments, Nuclear Science and Techniques, Plasma Physics and Controlled Fusion, Journal of the Optical Society of America A, Nuclear Instruments and Methods in Physics Research A
5 Most relevant publications:

Pompili, R., et al. "Energy spread minimization in a beam-driven plasma wakefield accelerator." Nature Physics 17.4 (2021): 499-503.

Pompili, R., et al. "Focusing of high-brightness electron beams with active-plasma lenses." Physical review letters 121.17 (2018): 174801.

Cianchi, Alessandro, et al. "Frontiers of beam diagnostics in plasma accelerators: Measuring the ultra-fast and ultra-cold." Physics of Plasmas 25.5 (2018): 056704.

Cianchi, A., et al. "Six-dimensional measurements of trains of high brightness electron bunches." Physical Review Special Topics-Accelerators and Beams 18.8 (2015): 082804.

Cianchi, A., et al. "High brightness electron beam emittance evolution measurements in an rf photoinjector." Physical Review Special Topics-Accelerators and Beams 11.3 (2008): 032801.