Curriculum Vitae

Informazioni personali/ Personal Information

Nome e Cognome / Name and Surname ***Andrea Marchese***
Genere / Gender Maschio

Esperienze professionali/ Work Experiences

15/07/2024 -FBK
Development of hybrid superconducting-magnetomechanical quantum devices in the Hy-QMS project. I developed and characterized planar superconductor devices coupled to magnetic microcantilevers to realize quantum magneto-mechanical systems and ultrasensitive magnetometers.

01/12/2023 - 31/05/2024Datrix S.p.A.
Full stack development of hyperspectral cube data analysis software (https://ramapp.io/) and grant proposal writing for R&D data science projects.

01/10/2021 - 31/10/2023Universitat de Barcelona
European collaboration aimed to develop imaging tools with high spatio-temporal resolution to observe heart-mimicking living tissues. I illuminated an object with multiple flickering lights using acousto-optic deflectors and radiofrequencies, and used Fourier analysis to reconstruct the image of the object at kHz rates (Nanophotonics 13(1):63-73).

Istruzione e formazione/ Education and Training

01/09/2015 - 28/02/2022PhD in condensed matter physics. Free electron lasers (FELs) are particle accelerators used to produce intense infrared elec- tromagnetic radiation for experiments. Combined with ultra strong magnets (up to 33 T), they allow us to study materials under unique conditions and explore new states of mat- ter. During my Ph.D., I coordinated some of the first experiments ever done that combined FELs and ultra strong magnets. I designed and developed an experimental setup for optics experiments over a wide range of wavelengths (from far-infrared to UV light), combining waveguides, optical fibers, cryogenics and vacuum components.

01/10/2008 - 26/06/2015Bachelor and master degree in Physics. Experimental condensed matter thesis: "Optical and Terahertz properties of Dirac mate- rials". A study of semiconductors with novel electronic properties using Fourier transform infrared spectroscopy, synchrotron radiation and intense magnetic fields at cryogenic temper- atures. The measurements were performed at different international institutes/user facilities: Sapienza Terahertz - University of Rome, IRIS THz/

Infrared Dipole Beamline of BESSY II Synchrotron, Helmholtz Zentrum, Berlin, HFML at the Radboud University, Nijmegen

Competenze personali/ Personal Skills

Lingua madre / Mother tongue: Italian

Altre lingue / Other languages*	Livello / Level *
Dutch	B1 - Intermedio
Spanish	B1 - Intermedio

*Autovalutazione / Self-assessment: Quadro Comune Europeo di Riferimento delle Lingue / Common European Framework of Reference for Languages

Altre competenze/ Other Skills

Altre competenze / Other skills

Patente di guida / Driving licence

Ulteriori informazioni/ Additional Information

Sito personale / Personal web pages: https://www.linkedin.com/in/andrea-marchese/

Ulteriori Informazioni / Additional Info