<u>Curriculum vitae Marco Toppi</u> (updated on 27/03/2025)

PERSONAL INFORMATION

Family name, First name: Toppi, Marco

Researcher unique identifier ORCID: 0000-0002-0392-0895

Date of birth: 10/10/1983

Nationality: Italian

- **CURRENT AND PREVIOUS POSITIONs**

10/2022 – now	Researcher (RTD B), SSD PHYS-01/A
	Dipartimento di Scienze di Base a Applicate per l'Ingegneria (SBAI)
	Sapienza Università di Roma - Italy
01/2020 – 10/2022	Researcher (RTD A), SSD PHYS-01/A
	Dipartimento di Scienze di Base a Applicate per l'Ingegneria (SBAI)
	Sapienza Università di Roma - Italy
03/2016 – 2019	Post.Doc at the Laboratori Nazionali di Frascati (LNF) of INFN
	Development of integrated technologies for monolithic pixel trackers, (within the ALICE experiment)
11/2014 – 2016	Post.Doc at the Laboratori Nazionali di Frascati (LNF) of INFN
	Nuclear Techniques applied to Medical Physics

- **EDUCATION**

  - PhD – Excellence: *Fragmentation measurements with the FIRST experiment*, Physics Tor Vergata University, Rome – Italy - PhD Supervisors: Prof. Annalisa D'Angelo, Prof. Vincenzo Patera
  - Master Degree - 110/110 cum laude. *Study of the electric discharge in gases by analyzing waveforms induced in RPC with gaps of various sizes -* Physics Tor Vergata University, Rome – Italy - Master Supervisor: Prof.Rinaldo Santonico, Dr. Barbara Liberti

- Bachelor Degree - 108/110. *Forme di Dinamica Relativistica* - Physics Tor Vergata University, Rome – Italy - Master Supervisor: Prof. Emanuele Pace

● **SCIENTIFIC RESPONSIBILITIES and COORDINATION ACTIVITIES**

2023 – now   **Physics Coordinator** of the FOOT collaboration

2023 – now   **Local responsible at SBAI and Substitute PI for the project "reSPECT: Towards a new family of nuclear imaging gamma detectors" –** Funding: 304 keuro. PRIN U 40: PROGETTI DI RICERCA DI RILEVANTE INTERESSE NAZIONALE – Bando Prin 2022 - Decreto Direttoriale n. 104 del 02-02-2022 - Prot. 2022Z72Y3K

2023 – now   **Local responsible at SBAI and Substitute PI for the project "CETRA: an innovative imaging tool for adaptive IOeRT" –** Funding: 216 keuro. PRIN U 40: PROGETTI DI RICERCA DI RILEVANTE INTERESSE NAZIONALE – Bando Prin 2022 PNNR - Decreto Direttoriale n. n. 1409 del 14-09-2022 - Prot. P2022LCYEW

2021 – 2023   **FlashDC** (Flash Dosimeter Counter) - "Progetti di Gruppi di Ricerca 2020" of Regione Lazio (150 keuros). <u>Responsible</u> for the WP1: Detector development of a dosimeter for FLASH radiotherapy.

2021 – 2022   **Deputy Software Coordinator** of the FOOT collaboration

2020 – 2022   **3DIT**: 3D plastIc scintillaTor - University calls for research, SAPIENZA University, (10keuro), I work at the characterisation of 3D printed samples of organic-metallic scintillator for low cost, high rate SPECT imaging.

2019 – 2021   **PAPRICA** (Pair PRoduction Imaging ChAmber) - INFN CSN5 national project (75keuros). <u>Local Coordinator</u> for the experiment at LNF

● **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

2019 – now   Member of the FOOT collaboration [https://web.infn.it/foot/en/home/]

2016 – 2024   Associate Member of CERN as member of the ALICE collaboration in LNF

2016 – 2024   Member of the ALICE collaboration @ CERN

2011 – 2016   Member of the FIRST collaboration (FIRST – Fragmentation of Ions Relevant for Space and Therapy)

- **RESEARCH ACTIVITIES**

My research focuses on the field of **Nuclear Physics** and its application to the field of medical physics and in particular to Particle Therapy**,** Radioprotection and Space Radioprotection. The bulk of my research activity, since my PhD, was focused on the study of the nuclear fragmentation and in the development of new detectors. Within the ALICE collaboration I studied light flavour production for the understanding of the Quark Gluon Plasma. I took care of the development and production of the Inner Tracking System (ITS2), the actual vertex detector of ALICE, based on silicon monolithic pixel sensors (ALPIDE)

For the total number of publications, I can quote:

- **h-index of 48** with more than 351 publications in refereed international journals for a total of more than 7800 citations (https://www.scopus.com/authid/detail.uri?authorId=56266672500)
- **5** publication as first author and **3** publication as corresponding author (excluding conferences' proceedings)