

## **Short Curriculum Vitae of Roberto Frezzotti**

Roberto FREZZOTTI, full professor of Theoretical Physics at the Univ. of Roma Tor Vergata (UTOV), Physics Dept. since December 2021.

Born in Rome, Italy on December 21, 1966, Msc (1991, supervisor G.C. Rossi) and PhD (1995, supervisor R. Petronzio) at UTOV. Postdoc fellow at INFN-Roma2, DESY-Hamburg, MPI fuer Physik-Munich, Univ. Milano Bicocca and INFN/Milano. Associate fellow at CERN (Mar-Aug 2001). Permanent staff researcher (2005-2014) and associate professor (2014-2021) at UTOV.

Teaching: diplome courses on "Mathematical Methods of Physics" (2013 to now) and exercitations (2005-2013); master course on "Elementary Particles Phenomenology" at UTOV. Lectures at PhD schools on lattice QCD and applications. Member of the Physics Ph.D. school of UTOV. Supervisor of ~20 master students, plus a few Ph.D students and postdoc fellows.

Coordinator for the evaluation of Italian research in Theoretical Physics within VQR 2015-19.

Research: lattice field theory and applications to Flavour Physics, Standard Model Parameters and Precision Tests. Theoretical methods: lattice regularization of gauge theories with fermions (twisted mass Lattice QCD), non-perturbative operator renormalization; ratio method for b-quark physics in lattice QCD; leading isospin breaking effects (LIBE) on hadronic observables in QCD+QED. Study of a new mechanism for elementary particle mass. Hadronic Vacuum Polarization (HVP) contributions to the muon anomalous magnetic moment, smeared  $R(e+e^- \rightarrow \text{hadrons})$ , inclusive decay of tau lepton.

Founding member of the European/Extended Twisted Mass Collaborations; key scientist in 5 PRIN/IT research projects, ~10 PRACE/EU and EuroHPC projects on Tier0 computers. P.I. of research projects: "LIBETOV" (2014,UTOV), "PLepNuGam" (PRACE/EU, call 17) on flavour physics with LIBE and two EuroHPC Extreme Access projects on the muon g-2 HVP contributions (2023-24, 2024-25). Member of the LOC of Lattice2010, expert referee of Physical Review D.

Coauthor of 80 peer-reviewed papers + 83 publications with >8300 (two with 500+) citations and h-index=48 on HEP-INSPIRE; >4850 citations and h=41 on Scopus; >9100 citations and h=49 on Google Scholar; top-250 rank in the "Top Italian Scientists". Two dozens of invited talks, of which 4 plenaries.