

**Nadia Pastrone: breve biografia**

Nadia Pastrone, Ph.D. in Particle Physics at the University of Torino is research director at INFN-Torino, with the main field of interest in experimental high-energy physics using accelerators, exploring QCD (charmonium spectroscopy), Standard Model (CP violation and the Higgs boson) and searching for new signals Beyond SM in several international collaborations at Fermilab (USA) and CERN.

Presently working in the CMS collaboration at CERN-LHC, where she was the elected national representative during the years of the Higgs boson discovery (2013 Physics Nobel Prize).

As president elected of the INFN HEP physics with accelerators Committee (CSN1) she steered the approval and the commitments to the upgrade of ATLAS and CMS for the high luminosity phase of LHC, planned to start in 2027. She was always promoting R&D activities for detectors and accelerators, now as the INFN scientific contact for AIDAInnova EU project and leading the Muon Collider network within the I.FAST EU project.

The study of the accelerator’s parameters always plays a significant role to achieve scientific results, and also marks her career since the antiprotons deceleration studies at FNAL in 1988 to the present strong engagement to design a multi-TeV Muon Collider and forming since 2020 the new international collaboration at CERN, after chairing the working group to prepare the input document for the European Strategy update.

Presently she is engaged in the on-going SnowMass21 USA strategy process, on multi-TeV colliders.

Her work on diagnostics tools for cultural heritage as chair of a regional project that built the unique 2D and 3D X-rays apparatus for the Conservation and Restauration Center “La Venaria Reale” (TO), resulted in her present collaboration within the INFN-CHnet project.

With the 2014 Ravani-Pellati Award for Physics by the Academy of Sciences of Torino (Italy), she is now a corresponding member (Sciences Class) since 2015.

CMS guide at CERN, co-author of a STEAM theatre pièce “The Hidden Force. Women Scientists in Physics and in History” played since 2020 and also proposed as school education project, Nadia Pastrone is promoting physics and science with public talks and exhibitions. At present she is the president of the CentroScienza Onlus association, founded in Torino by Tullio Regge and Piero Bianucci.

