

Patrizia Azzi: breve biografia

Patrizia Azzi is an experimental particle physicist at INFN Padova. She specialises in analysing data coming from particle collisions.

During her 20+ years experience she was part of two very important discoveries in particle physics: the top quark at the Fermilab Tevatron with the CDF experiment in 1995 and the Higgs boson at the LHC with the CMS experiment in 2012.



Currently she is focusing on the design of new future colliders. One of these ambitious projects is the Future Circular Collider at CERN. It will consist of a 100km tunnel that will host first an electron-positron collider (FCC-ee) followed by a proton-proton one (FCC-hh) which will reach ten times the energy of the current LHC.

Which characteristics must have the next generation detectors to fully exploit the potential of these new colliders? How can we measure with unprecedented precision particles that we may think we know very well (Z, W, Higgs and top)? Will we detect new particles that could be dark matter candidates? These are typical questions that Patrizia together with her colleagues at CERN and INFN is trying to answer.

Patrizia is also a proud mother of three and she is engaged in inspiring more young girls to pursue STEM studies with Women in Technology (WIT) at CERN 100esperte of Fondazione Bracco and Empowerment Lab.