Curriculum vitae et studiorum Prof. Francesca Soramel

## **Education**

June 1980 - June 1981 Fellowship for graduating student at Institute für KernPhysik (IKP), Kernforschungsanlage (KFA), Jülich, Germany 18th June 1981

Italian Master degree in Physics at Mathematical, Physical and Natural Sciences Faculty, University of Padua. Thesis "Spectroscopy of the 15062Eu87. Isomeric decays studies." Tutors: Prof. O.W.B Schult and Prof. C. Signorini

## Work Experience and Responsibility Roles

July 1981 - June 1982 Post-doctoral position at IKP-KFA, Jülich, Germany

May 1983 - December 1983 Fellowship at Centre de Spectromètrie Nuclèaire et de Spectromètrie de Masse (C.S.N.S.M.), Orsay, France.

September 1983 - October 1992 Research Assistant at the Mathematical, Physical and Natural Sciences Faculty, University of Padova.

September 1991 - September 1992 Guest scientist at Argonne National Laboratory, Argonne, Illinois, USA

Novembr 1992 - February 2005 Associate Professor of General Physics at the Engineering Faculty, University of Udine, ITALY

October 2003 - September 2008 Member of the Executive Board of the Engineering Faculty, University of Udine, ITALY

February 2004 - September 2006 In charge for the Orienteering and Tutoring programs of the Engineering Faculty, University of Udine, ITALY

February 28th 2005 - September 2008 Full Professor of Experimental Physics at the Engineering Faculty, University of Udine, ITALY

October 1st 2006 - September 30th 2008 Deputy Director of the Engineering Faculty, University of Udine, ITALY Since October 1st 2008 Full Professor of Experimental Physics at the Engineering Faculty, University of Padova, ITALY

November 2008 - December 2011 President of the Didactics Committee - Physics Department – University of Padova

December 2009 - December 2011 Deputy Director of the Physics Department - University of Padova

January 2012 - September 2019 Head of the Physics and Astronomy Department - University of Padova

2013 - 2017 CEV for ANVUR

January 2014 - January 2015 Member of the Independent Evaluation Unit (Nucleo di Valutazione) of the University of Udine

October 2014 - September 2019 Member of the Senato Accademico of the University of Padova

Since January 2017 Member of the Executive Board of Con.Scienze as one of the two delegates of the Italian Physics Departments Directors

January 2018 - December 2022 PI of the project "Physics of the Universe" - national call "Dipartimenti di eccellenza"

Since November 2020 President of the Independent Evaluation Unit (Nucleo di Valutazione) of SISSA

December 2020 – December 2022 Member of the Commission for the Supervision of Teaching Quality (CPQD), one of the three entities forming the University Quality Committee

December 15th 2020 - December 31st 2023 Scientific Coordinator of SPES project at Laboratori Nazionali di Legnaro - INFN - Legnaro (Padova)

## Scientific activity

My research activity has been carried out in the framework of the projects funded by the National Institute for Nuclear Physics (INFN), the Italian Agency for Nuclear and Subnuclear Physics; in particular, I've been involved in fundamental nuclear physics research programs.

Initially, my main field has been the in-beam gamma spectroscopy of nuclei in the rare earth region, then I moved also towards studies of the nuclear reaction mechanism between two interacting nuclei at energies close to the Coulomb barrier.

In both fields I've been in particular involved in nuclear structure studies performed using a mass spectrometer to identify proton emitting nuclei and to study the nuclear reaction mechanism involving radioactive beams with halo structure.

The wide variety of the research activity I've been involved in, together with the experience acquired during the long term appointments at foreign laboratories, has allowed me to acquire a deep knowledge of the scientific and technical problems of low energy nuclear physics, in particular I've developed a specific knowledge of the experiments performed with mass spectrometers like the Recoil Mass Spectrometer of the Legnaro National Laboratories (LNL) or the Fragment Mass Analyzer (FMA) of the Argonne National Laboratory (ANL).

I've been national spokesperson for the INFN experiment IRIS (1996-2000) devoted to the study of proton emitting nuclei.

In most recent years I moved part of my activity towards relativistic energy nuclear physics, collaborating to the CERN experiments NA57 and ALICE. Both experiments aim to study the Quark Gluon Plasma (QGP) state of the matter. My contribution to NA57 experiment has been mainly concentrated in the data collection during the runs and in the pre-analysis of the data.

For what concerns ALICE (A Large Ion Collider Experiment), I've been involved in the construction of the most inner part of the Inner Tracking System (ITS), i.e. the Silicon Pixel Detector (SPD). In particular I've been involved in the determination of the assembly procedure of the detector and I've tutored three Master Degree and one PhD thesis for the study of the mechanical and thermal stresses that the SPD may undergo.

I'm responsible of the "Dipartimenti di eccellenza" project assigned to the Physics and Astronomy Department of the University of Padova, named Physics of the Universe. The five year project has about 10 M€ budget and has been assigned to five Physics Departments all over Italy following a national call.

I've been member of several Organizing Committees of international Conferences and Workshops and, in some cases, editor of the Proceedings.

I spent quite a bit of time (3.5 years) working in foreign Laboratories (Germany, France, United States) developing specific competencies and skills.

I'm co-author of more than 550 publications in refereed international journals and my h-index is 79 (ISI – WoS, November 2021).