Round Table: Nuclear physics and Society

Convener: M. J. G. Borge (IEM-CSIC, Spain)

Participants:

Alessandra Fantoni, Anika Thiel, Thomas Carreau, Christian Appelt, Thomas Cocolios and Sascha Schmeling

Fundamental nuclear science and curiosity-driven research is a rich area of knowledge and development with a broad range of applications and impact on our society. Our community also has a key economic impact through the training of a highly specialised workforce in nuclear science and technology.

To further develop this pool of knowledge for future generations, however, we must not only explore these areas of knowledge, understanding and development, but communicate them to – and develop them jointly with – the next generations, through outreach, education, and training. We must invite both the present and the next generation into the wealth of career options and career development opportunities in the nuclear sciences and across our society, supporting their integration into a diverse and inclusive work environment.

For this round table animated by Maria J G Borge we count with different scientist

Christian Appelt He started in a manufacturing company working for 5 years, then he decided to study engineering at Berlin and after an internship in Erlangen discoverer his real passion and decided to study physics and 2024 he become doctor in Physics by the Humbolt University in Berlin. His PhD work got both a prize by the University and by the ATLAS Collaboration.

Since 2024 Representative of the Early Career Scientists in ATLAS and Chair of the LHC Early Career Scientists Fora (2025-2026

Thomas Carreau PhD in 2020 at LPC Caen in the field of theoretical nuclear astrophysics. Then he moved to the private sector to apply artificial intelligent in the computer vision, 4 years developing AI models to automate video editing and later in the maritime sector. Recently he returned to LPC Caen as research engineer to apply deep learning methods to improve nuclear data acquisition.

Thomas Cocolios Thomas is professor at KU Leuven, performing research on radioactive ion beam production and ground-state nuclear properties at ISOLDE, MEDICIS and PSI. Thomas was the convener of the chapter on Applications & Societal Benefits of the recent NuPECC Long Range Plan. He is one of the founders of LGBTQ-CERN and a member of the diversity working group of the KU Leuven Faculty of Science.

Alessandra Fantoni Senior research at INFN Laboratori Nazionali di Frascati. Experimentalist in Nuclear Physics. Involved in the HERMES experiment at DESY, focused on studying the spin structure of the nucleon. She progressed from PhD student to the final Run Coordinator, Technical Coordinator, and Deputy Spokesperson. Also, important roles in the ALICE experiment. Since July 2025, chair of the ALICE Collaboration Board. She is **Chair of the European Physical Society (EPS) Nuclear Physics Division (NPD)**, and member of the EPS Executive Committee since 2023.

Sascha Schmeling He is the **head of the education team at CERN**. He originally studied mathematics, physics, and computer science to be a school teacher, PhD in particle physics at the

ALEPH experiment at LEP. After several years developing and teaching control systems at LHC systems., He created in 2009 the Education and Education Research Team at CERN, which he heads since. Sascha is the current chairperson of the European Physical Society's Education Division and member of the Executive Committee of the EPS.

Annika Thiel Since November **2024 Professor for hadron Physics** at the Justus Liebig University, Giessen, Germany. From 2014-2016 Elected member in the committee for gender equality at Univ of Bonn. In the period of 2019-2022 Elected member of the Young High Energy Physicist Association for Hadron and Nuclear physics (KHuK). Since 2020 member of the Young group leaders in Germany.

Since September 2024 chair of the NuPECC committee for early career researchers, NuFFER