

Panel session on "Physics Education"

The trajectory of physics curriculum and its impact on society

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Abstract

There is no doubt that physics is a cornerstone of technical innovation in society and is in the forefront of global issues and challenges. Within this context, the physics that is learnt and taught at all levels impacts society and its future. In this panel, renowned physics educators from three continents reflect, share and discuss the following pressing issues:

- What are the features of a purposeful and meaningful "physics curriculum for 21st century and its delivery"? How to optimize the continuum ranging from face-to-face to remote approaches prompted by the pandemic which is still ongoing in many parts of the world?
- How do we **engage today's students**? How to make physics more attractive to the modern students? Would teaching modern physics early on instead of introducing it later in the curriculum help to better engage students?
- What is the place of the **experimentation and 'generic skills'?** What other skills are important for work in the industry and for society.
- What careers await for future students outside of academia, including multidisciplinary, and non-traditional areas of employment?

To summarise, the panelists will provide their insights on how physics teaching and learning has changed since they started their careers and how they envision the future of physics education. They will offer their views on "how physics education can move forward and still maintain its disciplinary authenticity".