

Particle Colliders - Accelerating Innovation



Contribution ID: 4

Type: **not specified**

Particle Accelerators and Five Decades of Colliders

Friday, 22 March 2019 12:00 (30 minutes)

There are more than thirty thousand particle accelerators in the world, ranging from accelerators used for cancer therapy in modern hospitals to giant 'atom-smashers' such as the Large Hadron Collider (LHC) at CERN, used to unravel the secrets of the universe.

This presentation gives an overview of the history of particle accelerators, starting at the beginning of the 20th century and continuing all the way to the most advanced accelerators and colliders that are in operation today. Professor Myers presents the fundamental principles that are used to accelerate charged particles, challenges that had to be overcome to push the energy and intensity limits, as well as how accelerators have been used for scientific discovery and what societal applications they have enabled. Finally, the presentation also gives a vision of how future accelerators will help gain an even better understanding of nature and prospects for new breakthrough technologies.

Presenter: Prof. MYERS, Steve