European Organisation for Nuclear Research (CERN)

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Tech development challenges in HEP experiments: Achievements & spin-offs

Abstract:

- The talk will discuss challenges in development of instrumentation and systems for accelerator based high energy physics. It will focus on various issues in development of critical components for accelerator, detectors, readout out electronics and computational facilities. The talk will highlight and illustrate how these challenges were overcome with help of industrial partners and academic institutions during development and production phase. It will also indicate how it affected the seeding of other technologies required for the country. The talk will discuss the next phase of R&D engagement with the upcoming advance facilities.

About the Speaker:

- Dr. V B Chandratre completed his MSc (Physics) from Pune University and joined BARC in 1988 after completion of the 31st batch of BARC training school. He did his PhD from Mumbai University. He has been involved in development of Application Specific Integrated Circuits ASICs, large area semiconductor silicon detectors and development of front end electronics for High Energy Physics experiments. He has developed number of ASICs, large area silicon strip detector for CERN CMS and large area Pixel detector for prototype FoCAL ALICE experiment. He is recipient of Technical Excellence Award from the Department of Atomic Energy, India.