Special Issue

Silicon Tracking Detectors: Lessons Learned from Past Productions, and Technologies for Future Application

Message from the Guest Editors

It is our pleasure to announce this Special Issue devoted to silicon tracking detectors. Silicon tracking detectors are widely used in high-energy particle physics experiments and will be important parts of future projects. This Special Issue will provide a summary of the state-of-the-art trackers used in current projects, from LHC and other HEP experiments, review lessons learnt. and provide an overview of various developments for future projects. Contributions are expected to deal with but are not limited to the following areas:

- Challenges and unexpected problems encountered in the most recent large silicon detectors' construction and operation;
- Ongoing activities on HL-LHC tracking detector development and (pre-)production;
- Novel silicon tracking detector technologies for future experiments;
- Novel technologies for tracking detectors from HL-LHC to FCC.

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The realization of dedicated instrumentation has always been a collateral aspect of experimental research. In addition, many groups dedicate efforts and resources solely to the development of new devices, sensors, equipment and large infrastructure, theoretical and numerical studies, and novel experimental methodologies. With *Instruments* we wish to address both established and emerging communities, also to favor the creation of innovative trans-disciplinary approaches. We see *Instruments* as an exciting high-impact journal that will soon hold a leading position in disseminating cutting edge scientific and technological research.

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