Special Issue

Applied Superconductivity for Particle Accelerator

Message from the Guest Editors

This Special Issue will summarize the current status of accelerator magnet technology for particle accelerators with particular focus on the challenges and possible innovations using HTS materials as the basis for a new paradigm. The following general topics will be covered.

- Current Status and Ultimate Potential of Nb3Sn
- HTS for Particle Accelerator Magnets
  - Conductor Properties
  - Magnetic Design
  - Fabrication Techniques
  - Quench Detection and Magnet Protection
  - High Current Cables
  - Test Results
  - Summary of Active R&D Programs

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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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