Annual Meeting of the Swiss Physical Society 2024



Contribution ID: 170 Type: Talk

[281] High Field Magnet Roadmap at PSI/CHART

Friday 13 September 2024 13:30 (15 minutes)

In the framework of the European High Field Magnet (HFM) program, hosted at CERN, and the CHART program hosted at Paul Scherrer Institute, the MagDev Laboratory at PSI pursues multiple projects for the advancement of high-field magnet technology for accelerators like the Future Circular Collider (FCC) require a substantial increase in magnetic field strength while maintaining high field quality. The PSI HFM R&D roadmap includes stress-managed low-temperature superconducting (LTS) magnet designs, the development of computational models for high-temperature superconducting (HTS) magnets, as well as the design and production of subscale hybrid (LTS-HTS) magnets. The outcomes of each program step shape the future direction of high-field magnet R&D at PSI.

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Session Classification: Accelerator Science and Technology

Track Classification: Accelerator Science and Technology