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【282】 NI magnet projects at PSI

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We present the work on non-insulation (NI) high-temperature superconductor (HTS) magnets at PSI as part of the CHART framework. Supported by modeling and small-scale experiments, we are building several NI solenoids which are to be installed in PSI's experimental facilities. These include a 72 mm warm bore 15 T solenoid for proof-of-principle positron production, a 18 T split coil for neutron scattering, and a very compact 6+T solenoid for X-ray scattering experiments. The high current density, high stability, and relatively straightforward cooling at 10-15 K make NI HTS magnets ideally suited for these DC applications.

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