

Development of Al-stabilized superconductor for the CEPC Detector Magnet

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A huge superconducting magnet is proposed for the future detector of Circular Electron Positron Collider (CEPC) at the Institute of High Energy Physics, Chinese Academy of Sciences (IHEP, CAS). The design field of CEPC detector magnet is 3 Tesla, the coil length is 9.15m, and the free bore is 7.07m. An aluminium stabilized Rutherford type conductor is developed for the CEPC detector magnet. This paper presents R&D process and the main features of the Al-stabilized conductor.

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