

The Iseult 11.75T Whole-body MRI magnet

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An innovative Whole Body 11.7 T MRI magnet, as part of the Iseult/Inumac project, a French-German initiative focused on very high magnetic-field molecular imaging, is under commissioning at NeuroSpin.

The Iseult/Inumac magnet is an actively shielded magnet manufactured from NbTi superconductor. It will generate a homogeneous field of 11.75 T within a 90 cm warm bore and it is operated at a current of 1483 A, in driven mode, in a bath of superfluid helium at 1.8K. After 6 years of fabrication, the magnet was delivered at Neurospin in May 2018.

After an introduction of the magnet design, this talk will present the main steps of the fabrication, the preparation of the cryogenic and electrical facilities and it will finally present the commissioning status of the magnet and of the ancillary equipment.