

20 T Dipoles and Bi-2212: the Path to LHC Energy Upgrade

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Abstract - Increasing the energy of the LHC would require a ring of ~20 T magnets using the superconductors Nb₃Sn and Bi-2212/Ag. The technology for Bi-2212/Ag wire, cable, and coil has advanced significantly but is still far short of the performance needed for such magnets. New technology for both wire and cable is under development, which if successful would yield the needed performance.

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