

**How a 100 TeV Synchrotron/Collider Based on the Nuclotron-type Cryomagnetic System Would Look Like.** A. BALDIN, A. KOVALENKO, N. AGAPOV, H. KHODZHIBAGIYAN, E. MATYUSHEVSKY, A. SMIRNOV, I. SHELAEV, JINR - The extrapolation of the Nuclotron-type cryomagnetic system parameters for a 100-TeV range synchrotron/collider is considered. The presented data are based on Nuclotron operational experience and R&D works on miniature iron-shaped low-field SC-magnets carried out at the Laboratory of High Energies. Possible ways for further optimization of very large scale cryomagnetic systems for hadron accelerators and colliders of the next generation are discussed.