

Simulation of the VINCY Cyclotron Magnetic Field Using a Model Magnet, S. CIRKOVIC, A. DOBROSAVLJEVIC, VINCA; J. FRANKO, G. GULBEKYAN, S. PASHCHENKO, JINR - This paper presents the experimental results of the magnetic field measurements on the model magnet designed to simulate the VINCY Cyclotron on the scale 1:10. Dependencies of the magnetic field on the various materials (steel-10 and ARMCO), methods of shimming (azimuthal and axial), and different kinds of plugs, were tested. These results were used to adjust the 2D magnetic field calculations in order to predict the further steps in accomplishing the isochronous magnetic field of the machine.