

Replacing GANTRY Planar Systems for Beams of Protons and Carbon Ions Transportation,
M.M. KATS, ITEP, Moscow, Russia - Two versions of planar immovable magnet optic systems for transportation to the patient of proton or carbon ions beams from various directions are described. According to calculations, these systems have significant advantages by comparison with usual rotated GANTRY, especially for ions transportation. The charged particles beam is banded and focused in one of the magnetic channels fixed immovably on the vertical wall and a patient is placed perpendicular to this wall. The planar system contains much more magnets but these magnets must not be rotated with high precision around the patient. The proposed system takes up less space in the building and consumes in the average less energy.