

Split-Pole PM Dipoles and Quadrupoles with Variable Field, V.S. SKACHKOV, ITEP - Several possibilities to replace electromagnets on beam transport channels by permanent magnet (PM) lenses are considered. The main attention is concentrated on a design and features peculiar to dipoles and quadrupoles with variable field in rather wide range of adjustment. A PM dipole sample on Nd-Fe-B alloy with 0.64 T at the centre of the magnet and about 100% field adjustment range is presented. It is shown that alloy with 1.4 T coercivity and 1.0 T remanent field is able to give appropriate linearity of the field.