

Orbit And Spin Transparent Siberian Snake And Spin Rotator With Solenoids

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For intermediate energies of electrons and protons it happens that Siberian snake and spin rotator more convenient to construct using solenoidal fields. Strong coupling caused by the solenoids is suppressed by a number of skew and normal quadrupole magnets. More complicate problem of the spin transparence of such devices also can be solved.

This paper gives two examples: spin rotator for electron ring in the eRHIC project and Siberian snake for proton (antiproton) storage ring HESR, which cover whole machines working energy region.