

Disables the nonlinear fringe of solenoid if nonzero. The default is 0. The transformation for the nonlinear fringe is expressed by

$$\exp(: H :), \quad H = -B_z / (8p^2 B \rho) p_\phi p_r, \quad (195)$$

where

$$p_\phi = xp_y - yp_x, \quad (196)$$

$$p_r = xp_x + yp_y, \quad (197)$$

whose canonical partners are

$$\phi = \text{ArcTan}[y/x], \quad (198)$$

$$r = \text{Log}[x^2 + y^2]/2, \quad (199)$$

respectively.