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

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

where

$$p_\phi = xp_y - yp_x, \tag{196}$$

$$p_r = xp_x + yp_y, \tag{197}$$

whose canonical partners are

$$\phi = \texttt{ArcTan}[y/x], \tag{198}$$

$$r = \texttt{Log}[x^2 + y^2]/2, \tag{199}$$

respectively.