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FFAGs and Cyclotrons with Reverse Bends[1] MICHAEL CRADDOCK, University of British Columbia, YI-NONG RAO, TRIUMF — This paper describes tracking studies of radial-sector FFAGs and cyclotrons with reverse bends using the cyclotron equilibrium orbit code CYCLOPS. The results for FFAGs confirm those obtained with lumped-element codes, and suggest that cyclotron codes will prove to be important tools for evaluating the measured fields of FFAG magnets. The results for radial-sector cyclotrons show that the use of negative valley fields would allow vertical focusing to be maintained, and hence allow intense cw beams to be accelerated, to energies as high as 10 GeV.

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