

SOME THOUGHTS ON STABILITY
IN NONLINEAR PERIODIC FOCUSING SYSTEMS

Edwin M. McMillan

Lawrence Radiation Laboratory
University of California
Berkeley, California

September 5, 1967

Abstract

A brief discussion is given of the long-term stability of particle motions through periodic focusing structures containing lumped nonlinear elements. A method is presented whereby one can specify the nonlinear elements in such a way as to generate a variety of structures in which the motion has long-term stability.