

A Method for Finding 4D Symplectic Maps with Reduced Chaos*, W. WAN, J.R. CARY, S.G. SHASHARINA, U. Colorado - We have previously proposed a method for finding integrable four-dimensional symplectic maps. The method relies on solving for parameter values at which the linear stability factors of the fixed points of the map have the values corresponding to integrability. We suggest that this method be applied to accelerator lattices in order to increase dynamic aperture. We have now implemented a computational scheme for the practical application of this method to accelerator lattices. Results will be presented.

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