

Optimisation of the Dynamic Aperture of DIAMOND, M. MUNOZ, H.L. OWEN and S.L. SMITH, CLRC Daresbury Laboratory, Warrington, WA4 4AD, UK - The present design of DIAMOND, the proposed 3 GeV light source for the UK, includes the provision of two very long straight sections (greater than 18 m) for unusual insertion devices. Such a racetrack solution poses a stringent design challenge for obtaining an acceptable dynamic aperture. This paper reports the methods used to maximise the dynamic aperture of this racetrack design, and presents the results found.