

Design of a Booster for the Brazilian Synchrotron Light Source (LNLS), R.H.A. FARIAS, L. JAHNEL, L. LIN, P.F. TAVARES, LNLS, Campinas - We present the conceptual design study of a multipurpose 400 MeV electron storage ring to be used both as a booster for 1.37 GeV UVX ring and as a storage ring for accelerator physics research. Our main interests in accelerator physics research are the development of storage-ring FEL in the ultraviolet region and the production of hard X-rays through Compton scattering of a laser beam. The main limitations for this project come from the limited space available for the components since it must be placed inside the existing UVX ring.