

**Injection and Extraction Schemes of the LSB Booster and Storage Ring, J. CAMPMANY, M. TRAVERIA, LSB, Barcelona, Spain** - We describe here the Injection and Extraction schemes for a new synchrotron light source in Barcelona (LSB). The LSB consists of a 100 MeV pre-injector, a booster synchrotron increasing the energy from 100 MeV to 2.5 GeV, and the storage ring running at least at 2.5 GeV. The beam into the booster is bent horizontally by a septum magnet (angle, 0.2 Rad), and then placed in the booster closed orbit by a fast kicker magnet (angle, 6 mRad). The extraction from the booster is also made through the combination of a fast kicker (5.6 mRad) and a first thin septum magnet (96 mRad). The beam is finally extracted by a dipole (98 mRad). The injection into the storage ring is accomplished via a mirror image of the scheme described above for the extraction from the booster (in so far as septum and dipole magnet is concerned). Four fast bumper magnets (with a maximum bending angle of 5 mRad) distributed along four cells in the storage ring generate the required closed orbit displacement of 20 mm at the injection point.