Contribution ID: **100** Type: **not specified**

The Design of a Soft X-ray Free Electron Laser (the SXL) for the MAX IV Laboratory

The SXL (Soft X-ray Laser) project is a design for a soft X-ray Free Electron Laser (FEL) in the 1–5 nm wavelength range, to be installed at and driven by the existing MAX IV 3 GeV linac. The project was initiated by a group of Swedish users of FEL radiation. In this contribution we will focus on the FEL itself developed for the first phase of the project based on two different accelerator operation modes.
The design work was supported by the Knut and Alice Wallenberg foundation and by several Swedish universities and organizations (Stockholm, Uppsala, KTH Royal Institute of Technology, Stockholm-Uppsala FEL center, MAX IV laboratory and Lund University)

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Session Classification: Plenary session

Track Classification: Posters