L-11 **Tue. 17. 06., 17^{00}-17^{40}**

MAX IV, the worlds brightest synchrotron radiation source.

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The MAX IV synchrotron radiation facility is currently being built in Lund, Sweden. The facility consists of 2 storage rings and one full-energy injector linear accelerator (linac).

The two storage rings are operated at 1.5 and 3 GeV respectively. Two 1.5 GeV storage rings will be built in a cooperation between MAX-lab and the Solaris facility in Krakow so one ring will be raised in Lund and the other in Krakow.

The 3 GeV storage ring in Lund is of the Multi-Bend Acromat (MBA) type which offers an emittance of 0.2 to 0.3 nm rad depending on the Insertion Devices (ID) chosen. This ring can be regarded as a fore-runner for other MBA projects around the world.

The linear accelerator will, apart from its injection task, also be used to produce fs high intensity X-ray pulses for the Short Pulse Facility (SPF). This facility has the potential of being upgraded to a Free Electron Laser (FEL) facility operated in the soft and hard X-ray spectral regions.

This talk will cover the design philosophy of the MAX IV facility as well as some of the technical solutions chosen. Finally, an international overview of Diffraction Limited Storage Rings (DLSR) being planned or constructed will be given.

L-12 **Tue. 17. 06., 17^{40}-18^{20}**

ESRF upgrade phase II

P. Raimondi