MAX II

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MAX-Laboratory is a National Swedish Laboratory for Research in synchrotron radiation science, photonuclear physics and accelerator physics. There are two storage rings: one 550 MeV ring (MAX I) which has been in operation since 1986 and one 1.5 GeV ring (MAX II), a third generation synchrotron radiation source, presently under commissioning. MAX II was formally approved by the Swedish Natural Research Council in 1990 and construction started in 1991. The construction was completed in March 1995 and the first beam was stored April 12, 1995. The storage ring is now in the final stage of commissioning: 170 mA has been stored, well above 50 mA has been ramped to 1.5 GeV, life-times and beam stability are as anticipated. The MAX II facility was formally inaugurated September 15, 1995.
In this talk I will present, in addition to the technical characteristics of the storage-ring, the plans and status of beamline construction. MAX II can accommodate a total of eight beamlines based on insertion devices and seven beamlines on bending magnets. The first construction phase has six approved beamlines for high-resolution spectroscopy and microscopy, x-ray lithography and microfabrication, inorganic and protein crystallography. The characteristics of and time-schedules for the development of these beamlines will be described. Finally, I will outline the future plans of the laboratory.