

Upgrade programs in storage ring based synchrotron light sources

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In this talk, we intend to present a review of current progress to modify or build new storage rings in order to obtain electron beam emittances close to the photon diffraction limit ones. Trends and challenges are discussed in terms of lattices, new concepts, devices and technologies. The expected improvement of the synchrotron radiation quality in such light sources shall be presented in terms of brilliance and transverse coherence.