STATE OF BEAM STABILITY AND CONTROL IN SYNCHROTRON LIGHT SOURCES

C. Steier, LBNL, Berkeley, California

Abstract
Beam stability is one of the most important properties for the users of a synchrotron light source. Beam stability includes the stability of orbit, beamsize, current (lifetime), energy, and energy spread. As light sources are generating higher brightnesses, adding fast switching variable polarization devices, and producing smaller source sizes, there is a necessity for continuous improvements in beam stability. In this talk an overview of the state of the art in beam stabilization and remaining challenges for beam stability are presented.