

Review of Future European Synchrotron Radiation Projects, L. RIVKIN, PSI -

The future European synchrotron radiation projects offer a wide and bright palette of sources. Successful operational experience with the high brightness third generation synchrotron radiation sources and growing users community, as well as maturing of the field of experimentation using synchrotron radiation are shaping the requirements on the future projects. Changing access requirements result in a variety of proposals for national, home based machines that would allow for enough beam time for development of new experimental techniques and for preparation of experiments on the less accessible, top performance machines. The new designs, pushing towards the fourth generation of sources, exhibit certain degree of specialisation. Among the directions pursued are higher average and peak brightness, with the corresponding high coherent flux, circular polarisation, shorter pulses for time resolved studies.