

## **Coherence properties of the EBS insertion device sources**

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A major upgrade of the European Synchrotron Radiation Facility is in progress. This upgrade, so-called Extremely Brilliant Source (EBS), aims to increase the brightness of the photon beams by a factor of 30 or more – boosting the experiments using coherence. The augmentation of the brilliance is driven by the reduction of the size and divergence of the stored electron beam. A new electron storage ring is being installed in that purpose. The EBS storage ring and photon sources will be presented in the first part of this talk. Then, emphasis will be placed on the coherence in synchrotron radiation (SR) light sources. The tools used to describe the brilliance and the coherent fraction will be reviewed. Finally, detailed studies of a few cases will be presented, showing the properties of the EBS insertion device sources at different energies.