Introduction to Synchrotron Radiation

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In this lecture the main characteristics of synchrotron radiation emitted by magnetic devices like bending magnets, wigglers and undulators will be illustrated. Namely it will be described what synchrotron radiation is, how and where it is produced, which are the main properties, how and why it is used. What it is expected for the future, with the advent of fourth generation facilities based on free electron lasers, will also be shown.