

Ph.D. Course in Materials Science and Nanotechnology

University of Milano-Bicocca, Department of Materials Science, via Cozzi 55, 20125 Milano

May 23, 2016 – 2.30 p.m.

Seminar room - Department of Materials Science U5

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Synchrotron Radiation Applied to Material Science

From the early days of the ancient philosophers the light-matter interaction has been regarded as one of the most important phenomena for unveiling the complexity of the matter and the intimate interplay between the laws of complexity and the structure of materials.

Nowadays, Synchrotron radiation, which can be regarded as “super-microscopes” operating in the direct and reciprocal space, are the most valuable tools we have for continuing to pursue such a quest. The radiation generated by these sources is thousands of billion times brighter than those produced by conventional light devices, allowing an unprecedented tailoring and control of the photon properties from THz to the hard X-ray spectral region.

This possibility unlocks the gate for directly observing the structure of the matter down to the Angstrom scale, along with the atomic and electronic structure of complex and exotic materials ranging for gas phase, to the soft, hard and biological matter.

Here I will report about some recent scientific achievements that are clearly paving the road toward one of the most significant steps of the modern scientific knowledge.

PhD students and all interested in the seminar are kindly invited to participate.

The PhD Coordinator
Prof. Gianpaolo Brivio