Seminário

EEL-USP PPGEM
PROGRAMA DE PÓS-GRADUAÇÃO EM ENGENHARIA DE MATERIAIS

"Condensed matter at Sirius, the new Brazilian synchrotron source"

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Sirius, the new Brazilian synchrotron light source at Campinas-SP, one of the brightest and first fourth-generation machines in the world, is opening up a plethora of opportunities to study areas such as condensed matter physics with conditions yet nonexistent. Today we have several challenges to provide a complete understanding of physical mechanisms in condensed matter phenomena, as superconductivity for example. That in part can be tackled by employing experimental x-ray techniques, such as XRD, XMCD, RIXS and ARPES, that will be available at Sirius to access, for example, how electronic states are affected depending on multiple factors (temperature, interface, crystallinity, applied fields and pressure, etc). This information could in principle be used to test, validate or propose new physics theories in ways not yet imagined. In this talk we will give an overview of several possibilities for condensed matter and materials research with synchrotron techniques at diverse conditions and sensitivities. The state-of-the-art light source will also be overviewed.

Local: Sala A15, Área II, DEMAR – EEL/USP
Horário: 11h00

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