



Department of Physics & Institute of Computational and Theoretical Studies

JOINT COLLOQUIUM

Materials Informatics: The 4th paradigm

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Abstract

Materials informatics (MI) may be considered as the 4th paradigm of scientific inquiry, in addition to experimental, theoretical and computational approaches. MI is made possible by the universal access to abundant scientific data, assisted by advances in software and machine learning (ML) to analyze the data. For materials problems with specific designing goals, physics-based indicators (or assumptions) are necessary to help narrowing down the informatics search. In this talk I shall discuss MI and ML, and apply them to materials screening for solid state electrolyte, 2D ferromagnetim and OLED materials.

Work in collaboration with Dr. Eric Zhu (HZWTECH), Dr. Yifa Qin (HZWTECH) and Dr. Xianghua Kong (McGill).

All Interested Are Welcome!