Tuesday, November 3, 2020, at 10:00 (Boston)
TIME CHANGE:
15:00 (UK/Eire)   16:00 (C. Europe)   23:00 (China)
Mathematical Picture Language Seminar

Zoom at: https://harvard.zoom.us/j/779283357?pwd=MitXVm1pYUlJVzZqT3lwV2pCT1ZUQT09

On the classification of topological orders with finite internal symmetries
Liang Kong, SIQSE, Southern University of Science and Technology

Abstract: In this talk, I present recent joint work with Tian Lan, Xiao-Gang Wen, Zhi-Hao Zhang and Hao Zheng (arXiv:2003.08898). We propose a mathematical theory of symmetry protected trivial (SPT) order, and of anomaly-free symmetry enriched topological (SET) order in all dimensions. We employ two different approaches (with an emphasis on the second one). Our first approach relies on gauging the symmetry. Our second approach relies on a boundary-bulk relation. We conjecture the equivalence of these two approaches, yielding a number of interesting mathematical conjectures.