## Seminar/Talk

# The Concept of Superconducting Fitness

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Host: Maksym Serbyn

In this talk I present a general scheme to probe the compatibility of arbitrary pairing states with a given normal state Hamiltonian by the introduction of a concept called Superconducting Fitness. This quantity gives a direct measure of the suppression of the superconducting critical temperature in the presence of key symmetry-breaking fields and can be used as a tool to identify nontrivial mechanisms to suppress superconductivity in complex multi-orbital systems. This concept can also be employed as a guide to engineer normal state Hamiltonians in order to favour or suppress different order parameters. I discuss the application of this idea to Sr2Ru04, CePt3Si, KFe2As2 and CuxBi2Se3.

**Tuesday, December 19, 2017 11:00am - 12:30pm**
Big Seminar room Ground floor / Office Bldg West (I21.EG.101)

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