SHUNJI MATSUURA, McGill University
Protected boundary states in gapless topological phases

I will talk about gapless topological phases of (semi-)metals and nodal superconductors. Using both K-theory and dimensional reduction procedures, a classification of topologically stable Fermi surfaces in (semi-)metals and nodal lines in superconductors is derived. We discuss a generalized bulk-boundary correspondence that relates the topological features of the Fermi surfaces and superconducting nodal lines to the presence of protected zero-energy states at the boundary of the system.