Neutrino-driven turbulent convection in stalled supernova cores
DAVID RADICE, CHRISTIAN OTT, Caltech, ERNAZAR ABDIKAMALOV, Nazarbayev University, SEAN COUCH, Caltech, ROLAND HAAS, Max Planck Institute for Gravitational Physics, ERIK SCHNETTER, Perimeter Institute for Theoretical Physics — The dynamics of neutrino-driven turbulent convection, in the quasi-steady phases of a core-collapse supernova explosion following the shock stall, is emerging as being of crucial importance in aiding, or hindering, a successful explosion. In this talk I will present some recent and ongoing numerical studies done with the goal of a) characterizing neutrino-driven convection in a simplified setting and b) understanding finite numerical resolution effects in more realistic explosion models.