

SCGP Weekly Colloquium: Gregory Falkovich

Tuesday, September 5·1:15 – 2:15pm in room 102

Title: Zero charge and confinement in turbulence

Abstract: I shall describe the first tentative renormalization in turbulence theory. It is done for waves interacting via four-wave scattering. With Vladimir Rosenhaus, we found how multi-wave interactions renormalize an effective coupling. A particular result is a surprisingly physical and transparent criterium for distinguishing cases of strong turbulence dominated by bound states (solitons, shocks, cusp waves), like in confinement.