Title: Motives associated to Feynman Graphs **Speaker:** Spencer Bloch

ABSTRACT:

Computations by Broadhurst and Kreimer of Feynman amplitudes arising in perturbative quantum field theory reveal an intricate pattern of zeta and multi-zeta values. I will outline the calculus of passing from graphs to periods and motives, including a discussion of the relation between renormalization in QFD and limiting mixed Hodge structures.