

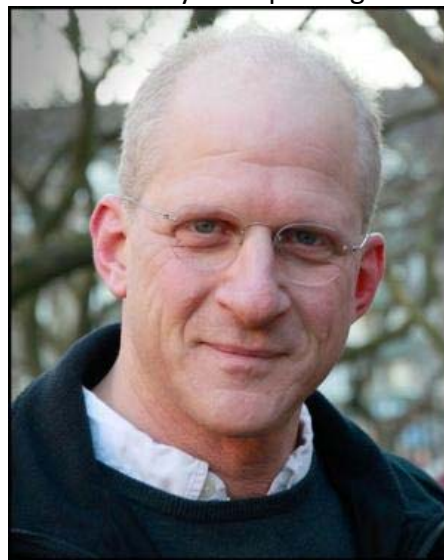
Department of Physics and Astronomy General Colloquium

Thursday, February 15th, 2018
PHYS 203 at 3:30 pm

(Refreshments served at 3:00 pm in PHYS 242)

Charles Marcus

University of Copenhagen



Semiconductor-superconductor hybrids for topological qubits and beyond.

This talk will describe the path from Majorana zero modes as a subtle bump in experimental data to a basis for quantum information processing, and where we are as a community along this path. With rather high surety, the zero-bias peaks that are observed are signatures of Majorana modes, but what about next steps? How hard are they, and what will be needed. Key to progress is the advances in material growth, particularly a new class of hybrids that combine superconductors with semiconductors. New results and outstanding challenges will be emphasized.