

QUANTUM HETERO- STRUCTURES PROVIDING TOPOLOGICAL PROTECTION

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An elegant approach to circumvent the decoherence problem in quantum computation are topologically protected systems. I will present design concepts based on two classes of semiconductor heterostructures to realize such topological protection. The first relies on highest-mobility two-dimensional electron gases in GaAs, which are essential for the fractional quantum Hall effect, the second on InAs/GaSb combined quantum wells as a platform for two-dimensional topological insulators.

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2:00 PM

CFEL
SEMINAR ROOMS I-III

