



# Quantum Information Processing and Metrology Using Few Electron Spins in Solids

Quantum computing and information processing use quantum two level systems as their building blocks. Solid-state implementations of quantum bits use, for example, single or few electron spins confined to small spatial dimensions. Harnessing the interaction of such electron spins with their environment offers intriguing possibilities for coherent electrical manipulation and controlled generation of entanglement with promising applications in nanoscale imaging and metrology.

**Amir Yacoby**  
Harvard University

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SCI 109, Metcalf Science Center, Boston University

Call: Winna Somers (wsomers@bu.edu) (617) 353-9320

Host: Anna Swan