

AVVISO DI SEMINARIO – CLASSE DI SCIENZE

23 GIUGNO 2023, ore 11.00

Meeting Room, Piano T c/o Laboratorio NEST (Piazza San Silvestro, 12 – PI)

Seminario in Nanoscienze

Hole spin qubits

Held by **Dr. Silvano De Franceschi**
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Abstract:

Hole spins in silicon-based quantum dots are emerging as a promising candidate for the realization of scalable spin-qubit architectures. Following a brief introduction to the field of semiconductor spin qubits, I will discuss recent advances in the development of hole-spin qubits in foundry-compatible silicon devices: the discovery of operational sweet spots maximizing hole-spin coherence¹ and the first demonstration of a strong-coupling between a hole-spin and a microwave photon in a superconducting resonator.