Topological Superconductivity in Superconductor-Semiconductor Hybrids

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Abstract:

Topological superconducting nanowires are characterized by Majorana zero modes, which can form the basis of topological qubits. In this talk, I will present some recent theoretical and experimental progress on these systems.

References

[1] Microsoft Quantum, "InAs-Al Hybrid Devices Passing the Topological Gap Protocol," arXiv:2207.02472. Figure 1: SEM image of a superconductorsemiconductor hybrid device.



Figure 2: Experimental phase diagram of a superconductor-semiconductor hybrid device.

Figures

