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Abstract for an Invited Paper for the MAR17 Meeting of the American Physical Society

New theory insights and experimental opportunities in Majorana wires ¹ JASON ALICEA, Caltech

Over the past decade, the quest for Majorana zero modes in exotic superconductors has undergone transformational advances on the design, fabrication, detection, and characterization fronts. The field now seems primed for a new era aimed at Majorana control and readout. This talk will survey intertwined theory and experimental developments that illuminate a practical path toward these higher-level goals. In particular, I will highlight near-term opportunities for testing fundamentals of topological quantum computing and longer-term strategies for building scalable hardware.

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