

Phenomenology 2020 Symposium



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SUSY phenomenology circa 2020

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Recent LHC Run 2 limits on SUSY particles and null WIMP search results lead some to believe that SUSY is largely excluded save for some remote regions of parameter space. This ignores several developments in the past 20 years, including 1. the emergence of the string landscape and its solution to the cosmological constant problem, 2. the importance of the strong CP problem and the axion, 3. the role of discrete R symmetries in solving the SUSY mu problem and generating both R-parity and a gravity-safe global PQ symmetry and 4. an improved understanding of naturalness including the notion of stringy naturalness. I briefly summarize each of these, then show the resulting most promising avenues towards SUSY discovery at collider and WIMP and axion detection experiments.

Summary

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