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## Lattice QCD and Axion Cosmology

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The Strong CP Problem can be resolved by introducing an additional global symmetry known as Peccei-Quinn symmetry.

Once PQ symmetry is broken the associated particle, the QCD axion, is a plausible dark matter candidate. Calculating the cosmological energy density of the axion requires nonperturbative QCD input—the high-temperature topological susceptibility.

I will show results from a pure-gluon calculation and examine the implications for the axion mass and coupling.

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