

# Loop Quantum Cosmology

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Loop Quantum Gravity is a very attractive attempt to perform a non-perturbative and background-independent quantization of general relativity. Applied to the Universe as a whole, the resulting framework, Loop Quantum Cosmology (LQC) has led to several important results beginning by the fact that the Big Bang singularity is resolved and replaced by a Big Bounce. In this talk, I will focus on showing that LQC naturally leads to inflation and could leave observational features that might be detected by the next generation CMB experiments.

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