

Primordial black holes: A fine (tuned) opportunity for probing inflation

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From the origin of the merging compact objects seen by LIGO-Virgo-KAGRA to the source of the stochastic gravitational waves seen by pulsar timing arrays via the QCD transition, there is a happy coincidence of scales which could point to primordial black holes. Combined with the long running dark matter search and hunt for new observables from inflation, there are many reasons to hope to learn a lot from PBHs. However, generating such black holes in a simple inflationary model remains far from simple.

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