

Primordial Black Holes from the Running-Mass-Inflation

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The running-mass inflation model generates the primordial curvature perturbation spectrum that is consistent with observations at the pivot scale but exhibits a very large running at smaller scales. This creates favourable conditions for the formation of primordial black holes. In the current work we analyse a novel mechanism that provides the graceful exit for this model and enables us to compute the shape of the full spectrum. Moreover, the created black holes are of the right mass and abundance to explain Dark Matter.

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