

Can primordial black holes form without fine-tuning?

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Primordial black holes (PBHs) may form in the early universe, and could have relevance to cosmic evolution, particularly as a dark matter candidate. Forming PBHs requires increased power on small scales, corresponding to some kind of feature in the inflaton potential. I will present a study of the fine-tuning of PBH formation for four representative inflation models, discussing the different sources of tuning and potential mitigation methods.

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