

# Building black holes and dark compact objects before Big Bang Nucleosynthesis

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I present a novel mechanism for creating primordial black holes and MACHOs. A heavy dissipative dark sector can come to dominate the universe, creating an early matter dominated era prior to Big Bang Nucleosynthesis (BBN). At this time the dark matter can form halos which persist after the phase transition back to radiation domination, and slowly collapse at late times. This leads to the late time formation of MACHOs and subsolar mass primordial black holes. This also leads to the formation of late forming low mass black holes which may Hawking radiate violently at late times.

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