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(Withdrawn) Concentrated Dark Matter and Primordial Black Holes

I will discuss a new mechanism for the primordial creation of dark matter, 'co-decay', where hidden sector particles comprising the dark matter have little or no interaction with the Standard Model. So how does one detect it? The hidden sector leads to a matter-dominated phase before Big Bang Nucleosynthesis, which results in enhanced growth of dark matter on small scales and the production of primordial black holes. If the enhanced sub-structure survives until today it implies interesting implications for indirect detection experiments. Whereas a more provocative result is that the mass of the most populated black holes resulting from this epoch is within the mass range recently detected by LIGO. I will also discuss how the hypothesis that part of the dark matter is primordial black holes can be tested.

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