## Constraints on Dark Matter from Dynamical Heating in Ursa Major III/UNIONS 1

We place bounds on models of heavy, compact dark matter, such as MACHOs or primordial black holes from dynamical heating in the recently observed Ursa Major III/UNIONS 1 ultrafaint dwarf galaxy (UFD). In UFDs dark matter is generically much hotter than stars and heats up the stellar gas through gravitational interactions, causing the stellar cloud to expand. The observation of the galaxies half-light radius allows to set constraints on compact object dark matter. In this talk I will present work in progress which extends the discussion in arXiv:2311.07654 and arXiv:2404.01378 and applies the methods to the recently observed Ursa Major III/UNIONS 1 which is the faintest dwarf galaxy observed so far. Simulations are consistent to it containing an enormous dark matter halo, making it a promising testing ground for compact object dark matter.

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