## **South African Gravity Society Conference 2025 (SAGS2025)**



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## The Meszaros effect with viscous dark matter

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Tensions between cosmological simulations and astronomical observations may be resolved by extensions to the  $\Lambda$ CDM paradigm. We consider the possibility that dark matter may self-interact and possess viscosity. Including dissipative effects in cosmic fluids will modify their clustering properties which could have observable effects on the formation of large-scale structure. We analyse the evolution of density perturbations during the radiation and matter eras and examine the impact of shear viscosity on the Meszaros effect.

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