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Memory burden effect in solitons: consequences for primordial black holes

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The essence of the \textit{memory burden} effect is that a load of information carried by a system stabilizes it. This universal effect is especially prominent in systems with a high capacity of information storage, such as black holes and other objects with maximal microstate degeneracy, the entities universally referred to as \textit{saturons}. The phenomenon has several implications. The memory burden effect suppresses a further decay of a black hole, the latest, after it has emitted about half of its initial mass. As a consequence, the light primordial black holes (PBHs), that previously were assumed to be fully evaporated, are expected to be present as viable dark matter candidates. In this talk I will review the memory burden effect and establish a precise correspondence in solitons and in black holes.
Finally, I will identify cer

Primary author: ZANTEDESCHI, Michael (Tsung-Dao Lee Institute, Shanghai, China)

Presenter: ZANTEDESCHI, Michael (Tsung-Dao Lee Institute, Shanghai, China)

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