Dark matter and black holes



Contribution ID: 220 Type: not specified

Planck relics as dark matter

Tuesday 2 December 2025 14:30 (30 minutes)

I will survey scenarios that produce Planck-mass relics and assess whether they can stably carry electric, magnetic, or dark charge. I'll examine charge retention and neutralization in the late Universe (including Schwinger discharge and plasma capture), and highlight quantum-gravity effects near extremality—especially for magnetically charged and near-extremal black holes. Finally, I'll outline concrete detection avenues.

Presenter: STEFANO PROFUMO

Session Classification: Plenaries 6-7: Sachiko Kuroyanagi and Stefano Profumo