Gravitational Geometry and Dynamics Group Seminar

Wed., Feb. 07th, 2024, at 11h00.

Room: Sala Sousa Pinto and **Zoom ID:** 989 6252 0928
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Signatures of domain wall networks: from gravitational waves to primordial black holes

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The Domain Wall (DW) problem is the fact that DW networks that result from the spontaneous breaking of discrete symmetries tend to dominate the universe's energy budget.

However, if the symmetry is not exact the network annihilates and the problem turns into a virtue, as the network tends to be an abundant component before its collapse, and is thus easier to probe.

In this talk, I will discuss recent progress in the study of the gravitational relics of DW networks - gravitational wave emission and primordial black holes formation - and the interesting possibility that such networks might be behind the recent GW signal observed at Pulsar Timing Arrays.

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