11th LISA CosWG Workshop



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Slow first-order phase transitions

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Strongly supercooled phase transitions cause a period of thermal inflation. Such first-order phase transitions typically generate a strong primary gravitational wave background from bubble collisions. In this talk, I will show that if the transition is also slow it leads to the formation of large inhomogeneities that source a secondary gravitational wave background. For sufficiently slow transitions the secondary background dominates over the primary one. I will also discuss the formation of primordial black holes in such transitions.

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