9th Edoardo Amaldi Conference on Gravitational Waves, Cardiff, 10-15 July 2011

Poster Title: Non-equilibrium "thermal noise" of low loss oscillators

Authors: G. Karapetian, P. Adamo, D. Agguiaro, M. Bonaldi, A. Borrielli, L. Castellani, P. De Gregorio, R. Hajj, C. Lazzaro, D. Mazzaro, M. Pegoraro, C. Poli, L. Rondoni, R. Thakur and L. Conti

Abstract: The RareNoise project aims at studying how ground-based gravitational wave detector are affected by the thermodynamic non-equilibrium states which are present in their experimental apparatus. We present the RareNoise experimental work which focuses on the study of the 'thermal noise' of low loss oscillators subject to steady-state thermal gradients. We also present the first results of the experimental campaign on steady-state non-equilibrium oscillators around room temperature.