International Workshop on: Simulating gravitation and cosmology in condensed matter and optical systems



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Substantiating analog Hawking radiation by inspecting the close vicinity of the acoustic horizon

Tuesday 23 July 2019 17:00 (15 minutes)

We compute the density-density correlation function near an acoustic horizon realized in a Bose-Einstein condensate.

A correct normalization of the field of Bogoliubov excitations necessitates to account for the contribution of zero modes.

Once this is achieved, one obtains a very good description of the recent experimental results of Technion's group.

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