

Abstract Submitted  
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**Sonic Black Hole in multi-component Bose-Einstein condensate<sup>1</sup>**

SANKALPA GHOSH<sup>2</sup>, PRIYAM DAS<sup>3</sup>, INDERPREET KAUR<sup>4</sup>, Physics Department, Indian Institute of Technology Delhi, New Delhi-110016, India — Recently, a sonic Black Hole (sonic BH) configuration has been created experimentally in ultra cold atomic Bose Einstein Condensate (BEC) of Rubidium atoms, where instead of light it is sound (phonons), which cannot escape. Related Hawking radiation and entanglement between phonons were also studied. We consider such sonic BH configuration in a multi-component BEC under synthetic gauge fields. We examine the analogue space-time metric for such sonic BH, event horizon to find out their dependence on the intra- and inter-species interactions and the gauge field. The two-body correlation function between the phonons inside and outside the event horizon are also analysed.

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<sup>2</sup>Associate Professor

<sup>3</sup>Post Doctoral Fellow

<sup>4</sup>Graduate (Ph.D.)Student

Sankalpa Ghosh  
Physics Department, Indian Institute of Technology Delhi, New Delhi-110016, In

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