



Contribution ID: 24

Type: **not specified**

## Testing seeded vacuum decay with cold atoms

*Thursday 25 July 2019 10:30 (15 minutes)*

This is the third of three talks exploring the feasibility of building a quantum simulator for vacuum decay.

In this presentation I will briefly explain how the usual treatment of vacuum decay in relativistic field theories can be adapted to the case of a two-components, non-relativistic Bose-Einstein condensate, focusing on the contribution of defects and potential walls. I will motivate that these effects are crucial to correctly estimate the decay rate, and illustrate this by showing results of stochastic simulations.

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