



Department of  
Theoretical Physics

# THE QUANTUM SPACETIME SEMINAR SERIES

## Quantum quench and symmetry restoration

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**Date:** November 22, 2022

**Time:** 11 AM IST

Zoom link shall be shared separately



We consider smooth, global quantum quenches for two dimensional, massless interacting fermions with large number of fermions. We find that the spontaneously broken symmetry (in equilibrium) gets restored via the smooth quench. We identify the scaling of the symmetry restoration time with the Kibble-Zurek scaling in the problem. We point out a connection with Liouville quantum mechanics in a suitable scaling limit. We end with comments on thermalization and generalizations.