

# Emergent Symmetries in Particle Physics, Cosmology and Condensed Matter Systems

Contribution ID: 3

Type: **not specified**

## Carlos Hoyos: "Impurities and holography"

*Wednesday 20 June 2018 11:15 (45 minutes)*

The Sachdev-Ye-Kitave model (SYK) and generalizations consist of quantum mechanical theories with an emergent conformal symmetry in the IR. It has been proposed that these theories serve as toy models of black holes in an emergent holographic dual description. I review the main features of this proposal and discuss similarities between SYK models and other systems such as magnetic impurities and Wilson loops.

**Session Classification:** Morning session