Contribution ID: **55** Type: **not specified**

# Schwinger pair production in global (anti-)de Sitter spacetimes

*Wednesday, 9 July 2025 12:10 (20 minutes)*

We study the spontaneous emission of spin-1/2 fermions in a uniform electric field in the global coordinates of two-dimensional (anti-)de Sitter space. The production of fermion pairs is enhanced in de Sitter (dS) space. However, it is reduced in anti-de Sitter (AdS) in which weak electric fields below the BF bound prohibits pair production. We discover a reciprocal relation between the mean number of fermions in dS space and AdS space provided that the spacetime curvature is analytically continued.

**Presenter:** CHEN, Chiang-Mei (NCU)

**Session Classification:** Parallel 2