

Théorie conforme des champs et systèmes quantiques à plusieurs corps  
21 août – 9 septembre 2022

Conformal field theory and quantum many-body physics  
August 21 – September 9, 2022

**Silviu Pufu**  
(Princeton University)

**Discrete chiral symmetry and mass shift in lattice Hamiltonian  
approach to Schwinger model**

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The Schwinger model, or quantum electrodynamics in 1+1 dimensions, is one of the simplest gauge theories. In this talk, I will first review a standard lattice discretization of this theory using the Kogut-Susskind Hamiltonian approach with staggered fermions. I will then present a new relation between the lattice and continuum mass parameters and show how this relation significantly improves the continuum extrapolations of various quantities computed on the lattice.