

# 25th Rencontres Itzykson - Many Body Chaos, Scrambling and Thermalization in Interacting Quantum Systems



Contribution ID: 8

Type: **not specified**

## Exact results on dynamics of dual unitary circuits and their perturbations

*Wednesday, June 2, 2021 4:00 PM (40 minutes)*

I will review the recent results on the proof of random matrix spectral form factor and explicit computation of correlation functions of local observables in the so-called dual-unitary brickwork circuits (including integrable, non-ergodic, ergodic and chaotic cases). Further I will show how these results can be extended to another quantum-circuit platform, specifically to unitary interactions round-a-face (IRF). I will argue that correlation functions of these models are generally perturbatively stable with respect to breaking dual-unitarity, and describe a simple rigorous result within this framework.

**Presenter:** PROSEN, T.