## Quantum cellular automata on fusion categorical spin chains

## **Corey Jones**

## 1. Abstract

Quantum cellular automata (QCA) are models of discrete time unitary dynamics on spin systems, that have many applications in the intersection of quantum information and quantum many-body physics. In this talk, we will motivate the study of QCA defined on general algebraic spin systems, and discuss recent progress on the classification of QCA on fusion categorical spin chains.