

# Holographic Construction of Excited CFT States in AdS<sub>3</sub>/CFT<sub>2</sub>

## Abstract

A central question in holography is how the bulk is reconstructed from QFT data. In this talk I will address a simpler question: “What is the bulk dual of a CFT state?”. I will focus on the case of a single scalar field propagating in the AdS<sub>3</sub> and construct the bulk dual to  $\mathcal{O}|0\rangle$ , where  $\mathcal{O}$  is a scalar operator, to first non-trivial order.