

## D3-brane solitons and black holes

*Monday 26 July 2021 13:50 (45 minutes)*

Four dimensional  $N=4$  SYM with gauge group  $SU(N)$  admits spherically symmetric, dyonically charged solitons holographically dual to certain probe D3-brane configurations in  $AdS_5 \times S^5$ . A peculiar feature of these solitons, that their masses and charges scale linearly with radius, have lead to the suggestion that they may in some sense provide a QFT analogue of extremal black holes. I will describe work investigating two particular black hole-like properties of these solitons: their quasinormal modes and their entropy.

**Presenter:** RODGERS, Ronald (University of Southampton)