Contribution ID: **13** Type: **not specified**

Larus Thorlacius: Probing emergent geometry in free vector and matrix models

Tuesday 16 May 2017 11:30 (1 hour)

Boundary correlation functions provide insight into the emergence of an effective geometry in higher spin gravity duals of O(N) or U(N) symmetric field theories. On a compact manifold, the singlet constraint leads to nontrivial dynamics at finite temperature and large N phase transitions even at vanishing 't Hooft coupling. At low temperature, the leading behavior of boundary two-point functions is consistent with propagation through a bulk thermal AdS space.
Above the phase transition, the two-point function shows significant departure from thermal AdS space and the emergence of localized black hole like objects in the bulk.