

At  $T > 0$ , there is a “black-brane” at  $r = r_h$ .

The Beckenstein-Hawking entropy of the black-brane is the thermal entropy of the quantum system  $r = 0$ .

The entropy density,  $S$ , is proportional to the “area” of the horizon, and so  $S \sim r_h^{-d}$