Questions – Lectures 24-26

April 19, 2016

24. The stress tensor in 3d gravity

1. Just to be clear, is (24.1) asymptotically AdS because the h terms are negligible on the boundary since they don't scale with r?

2. Why is it that we interpret the dz^2 piece of the metric as the gravitational stress tensor (up to a factor of $-1/4\ell$)?

3. I don't follow the argument below equation 24.13, "it was actually guaranteed..."

25. Thermodynamics of 2d CFT

4. Above (25.9): Why can we switch t and ϕ when the torus is Euclidean?

5. Below (25.12): Where was the "large" aspect relevant?

6. Below (25.14): Not sure I see the picture here... (too bad it's missing!)

7. I don't see in what sense a T-transformation generates 'winding' (see around equation 25.16).

26. Black hole microstate counting

8. What do the black hole microstates look like in the string theory calculation?