Entanglement spectra from holography

Interviene
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Introduce
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Abstract
We investigate the degeneracy in the distribution of the entanglement spectrum for holographic conformal field theories in general dimensions.
The input is given by the Renyi entropies for a spherical (or planar) entangling surface.
We show that the energy and entropy of the system satisfy a universal generalization of the Cardy formula valid in generic dimensions.
We then move to the case when a global charge is present in the system, focusing on the supersymmetric case obtained via a fine-tuning of the charge.
In such case, we derive another universal formula.
Finally, we show that small shape deformations of the entangling surface do not spoil the previous results.

Conferenza

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