Contribution ID: **55**                                           Type: **Plenary talk**

# Entanglement structure of geometric states in holography

*Tuesday, 29 August 2023 09:30 (1 hour)*

Motivated by a long-standing aim to understand the emergence of spacetime and its relation to entanglement in the context of gauge/gravity duality, we study the relations between subsystem entanglement entropies. These quantities are delimited by the so-called holographic entropy cone, characterized conveniently by holographic entropy inequalities or alternately by certain extreme states. This construct reveals a surprisingly rich structure, whose intricacy grows rapidly with the number of subsystems. We review recent progress in understanding the holographic entropy cone, both from the perspective of the defining inequalities as well as from that of the extreme rays, both of which seem to hint at a deeper organizational principle.

**Presenter:**   HUBENY, Veronica

**Session Classification:**   Morning session 1