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## Fuzzball Shadows: Emergent Horizons from Microstructure

*Tuesday, 6 July 2021 10:50 (20 minutes)*

I will present our imaging study of four-dimensional, string-theoretical, horizonless “fuzzball” geometries. Their microstructure traps light rays straying near the would-be horizon on long-lived, highly redshifted chaotic orbits. In fuzzballs sufficiently near the scaling limit this creates a shadow much like that of a black hole, while avoiding the paradoxes associated with an event horizon. Observations of the shadow size and residual glow can potentially discriminate between fuzzballs away from the scaling limit and alternative models of black compact objects.

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