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# Universal Horizons in Collapsing Reissner-Nordstrom Metrics

*Tuesday 14 June 2016 09:00 (15 minutes)*

An investigation of an analogous structure to an event horizon in theories which break Lorentz symmetry. Recent work has shown that in simple spacetimes Lorentz violating theories, such as Einstein-Aether or Horava-Lifshitz, singularities lie behind a *universal horizon* . In the limiting case, signals travel along an incompressible aether which results in an infinitely fast speed of propagation. Despite this property, a universal horizon always appears to form around a singularity disconnecting a region of spacetime from the larger universe. This talk will look at how these structures form during the collapse of a massive charged shell.

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