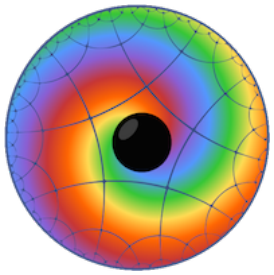

Contribution ID: **49** Type: **not specified**

Analogue holographic correspondence in optical metamaterials

Tuesday, 14 April 2015 17:20 (30 minutes)

We assess the prospects of using optical metamaterials for simulating various aspects of analogue gravity and holographic correspondence. Albeit requiring a careful engineering of the dielectric media, some hallmark features reminiscent of the conjectured 'generalized' (non-AdS/non-CFT) holography can be detected by measuring non-local optical field correlations. The possibility of such simulated behavior might also shed light on the nature of certain ostensibly holographic phenomena in the condensed matter, optical, and AMO systems with emergent effective metrics which may not, in fact, require any reference to the original string-theoretical holography.

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Session Classification: Parallel Session