

Seth Kurankyi Asante (Perimeter Institute for Theoretical Physics)

Title: "Holographic description of boundary fields for finite boundaries"

We shall discuss the interplay between holographic duality and boundary degrees of freedom known as boundary gravitons in (2+1) and (3+1) dimensions for spacetimes with finite boundaries. We shall describe a boundary theory for these boundary gravitons which can be encoded in geodesics lengths normal to the boundary spacetime. We shall also use renormalization techniques to compute the Hamilton Jacobi functionals and one loop partition functions for gravity. These renormalization techniques connect computations performed in both discrete and continuum spacetimes.