

An alternative bulk construction by the flow equation

Tuesday, 23 November 2021 16:00 (15 minutes)

We propose a new method to construct the bulk theory in $d + 1$ dimensions from d dimensional field theory, using a so-called fundamental flow. We show that the conformal symmetry at the boundary is converted to the AdS isometry in the bulk even at the quantum level. We define the metric operators, whose VEV describes the AdS space. We derive the GKP-Witten formula for the bulk scalar field. We finally show that the metric becomes asymptotic AdS in the presence of the scalar primary at the boundary.

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Session Classification: Short talks