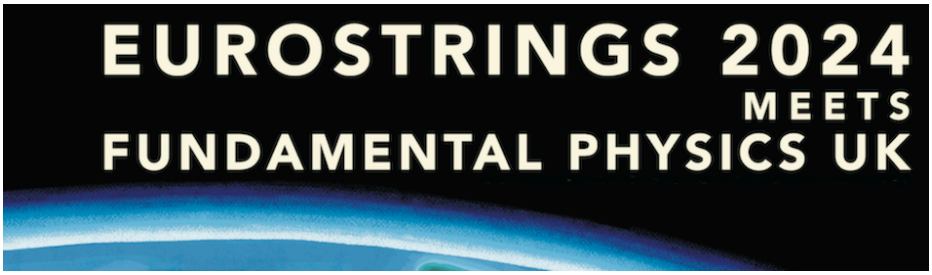

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Renormalization of Conformal Correlators and its Implications

Friday 6 September 2024 14:50 (20 minutes)

Conformal invariance implies strong constraints on the form of correlation functions of gauge invariant operators, and these correlators diverge when their conformal dimensions satisfy certain relations. These divergences and their renormalization has been understood up to three-point functions in general dimension, and for specific dimensions for holographic 4-point function in d=3. Going from odd to even dimensions increases the complexity of the analysis and in this work we discuss how to renormalize holographic 4-point functions in d=4. The analysis shows that new features arise and renormalization may impose constraints on the spectrum of the CFT.

Link to publication (if applicable)

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