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LPENS Particle physics phenomenology and cosmology

Mardi 23 Septembre 2025, 14 :00
LPENS, L378
Domaines : hep-th

Titre : *Integral Identities from Symmetry Breaking of Conformal Defects*

Orateur : **Ziwen Kong (DESY)**

Résumé : *Symmetry-breaking is an innate nature of defects. There is a distinguished set of defect operators that keeps track of the symmetries in the parent conformal field theory broken by the defect insertion, such as the tilt operators and displacement operators. I will discuss how the action of the broken symmetry transformations leads to a large class of integral identities for the correlation functions of the displacement and the tilt operators, and demonstrate these integral identities in the case of the magnetic line in* $O(N)$ *model and 1/2 BPS Maldacena-Wilson loop in* $\mathcal{N} = 4$ *SYM as examples.*