Contribution ID: **277** Type: **not specified**

Hidden symmetries in $\mathcal{N} = 2$ SCFTs

Wednesday 27 September 2023 14:18 (18 minutes)

4D $\mathcal{N} = 2$ SCFTs obtained from orbifolding $\mathcal{N} = 4$ SYM and then performing a marginal deformation exhibit hidden symmetries. Namely, the orbifolding procedure breaks some actions of the generators coming from the parent $\mathcal{N} = 4$ SYM. However, by employing a non-trivial co-product, the actions of the broken generators can be "restored" as generators of a hidden symmetry. In my talk I will focus on the particular example of the R-symmetry group of the $\mathbb{Z}_2$ quiver theory $SU(N) \times SU(N)$ in order to demonstrate some novel features of such symmetries. In particular, the hidden symmetry exhibited by this model allows one to relate $\frac{1}{2}$-BPS states of the $\mathcal{N} = 2$ SCFTs multiplets reminiscent of $\mathcal{N} = 4$ SYM.

Summary

Primary author: BERTLE, Hanno (UNI/TH (Uni Hamburg, Institut fuer Theoretische Physik))

Presenter: BERTLE, Hanno (UNI/TH (Uni Hamburg, Institut fuer Theoretische Physik))

Session Classification: Parallel Session Wednesday: Strings / Mathematicals Physics III

Track Classification: Strings & Mathematical Physics