Contribution ID: **250** Type: **not specified**

Hidden symmetries in 4D $\mathcal{N} = 2$ SCFTs

Wednesday 28 September 2022 17:00 (20 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 down some actions of the generators coming from $\mathcal{N} = 4$. However, by employing a non-trivial co-product involving a (Drinfeld) twist, 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

Presenter: BERTLE, Hanno

Session Classification: Parallel Session Strings

Track Classification: Strings & Mathematical Physics