

# Phenomenology 2023 Symposium



Contribution ID: 158

Type: not specified

## Constructing Operator Basis in Supersymmetry

*Monday 8 May 2023 15:30 (15 minutes)*

We will talk about a Hilbert series approach to build the operator basis for a  $N = 1$  supersymmetry theory with chiral superfields. We give explicitly the form of the corrections that remove redundancies due to the equations of motion and integration by parts. In addition, we derive the maps between the correction spaces. This technique allows us to calculate the number of independent operators involving chiral and antichiral superfields to arbitrarily high mass dimension.

**Primary authors:** MARTIN, Adam Orion (University of Notre Dame (US)); DELGADO, Antonio (University of Notre Dame); WANG, Runqing

**Presenter:** WANG, Runqing

**Session Classification:** Theory I