

1163-17-1254 **Dwight Anderson Williams II*** (dwight@iastate.edu). *Relations, parity, and super representation theory.*

Maps can tell us how to get from one place to another; maps can also encode various types of information. In the spirit of (super) representation theory, the maps in this talk provide new ways to consider the complex orthosymplectic Lie superalgebras. That is, we have new families of infinite-dimensional representations of $\mathfrak{osp}(1|2n)$. Keys to this result include using super differential operators to describe our maps, more precisely, homomorphisms of associative superalgebras, and being mindful of both relations and parity throughout explicit computation. Come for the wonder—stay for the calculus! (Received September 15, 2020)