

1144-18-161 **Nicolle Gonzalez*** (nesandov@usc.edu). *Categorical Bernstein Operators*.

Bernstein operators are certain infinite series of products of symmetric functions introduced by Bernstein and shown by Zelevinsky to create and annihilate Schur functions. When viewed in the context of vertex operators, the Bernstein operators are at the core of the celebrated Boson-Fermion correspondence, a relationship that relates the actions of the Heisenberg and Clifford algebras on Fock space.

In this talk we will discuss a categorification of these operators in the diagrammatic language of Khovanov's Heisenberg category and describe how these functors satisfy categorical analogues of the properties mentioned above. (Received August 23, 2018)