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Christopher Leonard* (ct13az@virginia.edu). *Graded Super Duality for General Linear Lie Superalgebras.*

Super duality is an equivalence between suitable parabolic BGG categories of general linear Lie (super) algebras at an infinite-rank limit. It was first proved by Cheng and Lam in 2010 and was used by those authors and Wang to first establish the Brundan-Kazhdan-Lusztig conjecture on the characters of irreducible modules over general linear Lie superalgebras. Brundan, Losev, and Webster gave a new proof of this BKL conjecture using uniqueness of tensor product categorifications, and showed that the BGG category \mathcal{O} for a (finite-rank) general linear Lie superalgebra has a unique Koszul graded lift. We adapt the BLW approach to provide a new proof of super duality; moreover we provide a lift to a ‘graded super duality’ - a graded equivalence of categories. (Received July 27, 2017)