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CLASSIFYING MODULE CATEGORIES FOR GENERALIZED TEMPERLEY-LIEB-JONES CATEGORIES

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**Abstract of Poster Presentation:** Module categories for tensor categories classify many interesting objects, including subfactors and quantum homogeneous spaces for quantum groups. Yamashita classified module categories over Temperley-Lieb-Jones (TLJ) categories and DeCommer-Yamashita provided a classification for generalized fiber functors of TLJ categories into bi-graded Hilbert spaces. We further generalize this work by providing a combinatorial classification for module categories over oriented and colored TLJ categories in terms of weighted directed graphs. This research is supported by David Penneys NSF CAREER grant 1654159.

[Joint work with Roberto Hernandez, Corey Jones]

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