1167-16-223 Jonathan Kujawa, Yiqiang Li and Jieru Zhu* (jieruzhu699@gmail.com). Categorification of Schur algebras of Type B and beyond.

The Type A Schur algebra admits a presentation as the quotient of Lusztig's dotted quantum group via extra relations by Doty-Giaquinto. Its categorification, given by Mackaay-Stosic-Vaz, uses a diagrammatic incarnation of these relations as a quotient of the Khovanov-Lauda-Rouquier 2-category. We give a presentation of the cyclotomic Schur algebra and explore its diagrammatic categorification. In Type B, a separate geometric categorification is given by Bao-Kujawa-Li-Wang uses isotropic flags and double flag varieties. Our result links the two approaches and suggest geometric interpretations of the new relations. This is based on two projects with J. Kujawa and Y. Li, respectively. (Received March 08, 2021)