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**Paolo Mantero** and **Matthew Mastroeni\*** (mmastro@okstate.edu). *A classification of Koszul algebras defined by four quadrics.*

A question of Avramov, Conca, and Iyengar asks whether the Betti numbers of  $R = S/I$  over  $S$  can be bounded above by binomial coefficients on the minimal number of generators of  $I$  if  $R$  is Koszul. Building on previous affirmative answers for Koszul algebras defined by three quadrics and Koszul almost complete intersections with any number of generators, we give an affirmative answer to the above question in the case of four quadrics by proving structure theorems for the possible defining ideals of such Koszul algebras over an algebraically closed field. We will attempt to highlight the main ingredients that go into this classification. (Received January 18, 2021)