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Ananthnarayan Hariharan* (ananth@math.iitb.ac.in), **Neeraj Kumar** and **Vivek Mukundan**. *Koszulness of certain diagonal subalgebras*. Preliminary report.

Given a bigraded algebra R , the diagonal subalgebra $R_{(c,e)}$ is Koszul for large values c and e . Conca, Herzog, Trung, and Valla give explicit lower bounds on c and e for Koszulness, when R is the Rees algebra of an ideal generated by a regular sequence. We do the same for other classes of ideals by studying residual intersections. This is joint work with Neeraj Kumar and Vivek Mukundan. (Received July 28, 2017)