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**Claudiu Raicu** and **Steven Sam\***, ssam@ucsd.edu. *Bi-graded Koszul modules, K3 carpets, and Green's conjecture.*

We extend the theory of Koszul modules to the bi-graded case, and prove a vanishing theorem that allows us to show that the Canonical Ribbon Conjecture of Bayer and Eisenbud holds over a field of characteristic zero or at least equal to the Clifford index. Our results confirm a conjecture of Eisenbud and Schreyer regarding the characteristics where the generic statement of Green's conjecture holds. They also recover and extend to positive characteristics the results of Voisin asserting that Green's Conjecture holds for generic curves of each gonality. (Received September 10, 2020)