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**Juliette Bruce\*** ([juliette.bruce@math.wisc.edu](mailto:juliette.bruce@math.wisc.edu)), 480 Linoln Dr, Department of Mathematics, Van Vleck Hall, Madison, WI 53706. *Asymptotic Syzygies in the Semi-Ample Setting*.

In recent years numerous conjectures have been made describing the asymptotic Betti numbers of a projective variety  $X \subset \mathbb{P}^r$  as the embedding line bundle becomes more ample. I will present recent work attempting to generalize these conjectures to the case when the embedding line bundle becomes more semi-ample. (Recall a line bundle is semi-ample if a sufficiently large multiple is base point free.) In particular, I will discuss how the monomial methods of Ein, Erman, and Lazarsfeld for proving non-vanishing results on  $\mathbb{P}^n$  can be extended to prove non-vanishing results for products of projective space. (Received August 08, 2017)