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**Jack Petok\*** ([jack.petok@dartmouth.edu](mailto:jack.petok@dartmouth.edu)). *Kodaira dimensions of some moduli spaces of hyperkähler fourfolds.*

The Noether-Lefschetz locus in a moduli space of  $K3^{[2]}$ -fourfolds parametrizes fourfolds with Picard rank at least 2. Following Hassett's work on cubic fourfolds, Debarre, Iliev, and Manivel showed that the Noether-Lefschetz locus in the moduli space of degree 2  $K3^{[2]}$ -fourfolds is a countable union of special divisors  $\mathcal{M}_d$ , where the discriminant  $d$  is a positive integer congruent to 0, 2, or 4 modulo 8. In this talk, we compute the Kodaira dimensions of these special divisors for all but finitely many discriminants; in particular, we show that, for  $d > 176$  and certain other small values of  $d$ , the space  $\mathcal{M}_d$  is a variety of general type. (Received August 17, 2020)