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Peter Vermeire* (verme1pj@cmich.edu), 214 Pearce, Department of Mathematics, Central Michigan University, Mount Pleasant, MI 48859. *Regularity and normality of secant varieties.*

We sketch a proof of the fact that for a smooth curve of genus g embedded by a line bundle of degree at least $2g+3$, the ideal sheaf of the secant variety is 5-regular. This bound is sharp with respect to both the degree of the embedding and the bound on the regularity. Further, we show that the secant variety is projectively normal for the generic embedding of degree at least $2g+3$. Time permitting, results on normality of secant varieties to varieties of arbitrary dimension may also be discussed. (Received August 28, 2007)