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Nikolai Chernov\* (chernov@math.uab.edu), Dept of Math, UAB, Birmingham, AL 35294, and Ali Al-Sharadqah, Dept of Math, UAB, Birmingham, AL 35294. *Fitting geometric curves in Errors-In-Variables models.* 

In classical regression the x-variable is non-random and the y-variable is random; it is well known that the least squares estimates are best, in the sense of the minimal variance. In modern regression models, both variables are subject to errors (though small and normally distributed). Then the least squares estimates have infinite (!) mean value and variance. This striking fact has various methodological implications in statistics and modern computer vision. (Received August 30, 2008)