1176-11-277 **Levent Alpöge*** (`levent.alpoge@gmail.com`). *Quadrics in arithmetic statistics.*

We will explain how to combine the delta method with Bhargava's counting technique in order to treat arithmetic statistical problems involving counting only orbits in the zero locus of a quadratic invariant.

We will do so by way of example, by explaining how to compute the average size of 2-Selmer groups in the families $y^2 = x^3 + B$ and $y^2 = x^3 + B^2$. (Received January 24, 2022)