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Alina Bucur* (alina@math.ucsd.edu), 9500 Gilman Dr #0112, La Jolla, CA 92093. *Point counts for complete intersections over finite fields.*

I will give a quick overview of some new developments in counting points on curves over finite fields. Then we will concentrate on giving a probabilistic model for the number of rational points on a complete intersection of hypersurfaces in projective n -space. A somewhat surprising corollary is that the number of rational points on a random smooth intersection of two surfaces in projective 3-space is strictly less than the number of points on the projective line. This is joint work with K. Kedlaya. (Received December 05, 2011)