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**Ohad Feldheim, Ron Peled and Arnab Sen\***, arnab@umn.edu, and **Ofer Zeitouni**. *Double Roots of Random Integer Polynomials*.

We consider random polynomials whose coefficients are i.i.d. integer-valued random variables. We will show that the probability that such a polynomial of degree  $n$  has a double root is at most  $O(n^{-2})$ . The proof exploits the algebraic nature of the roots of the polynomials with integer coefficients.

This is joint work with Ohad Feldheim, Ron Peled and Ofer Zeitouni. (Received August 11, 2015)