1172-13-74   **Alan Dills** and **Florian Enescu*** (`fenescu@gsu.edu`). *Counting skew monomials in the Frobenius skew polynomial ring.* Preliminary report.

We study the Frobenius skew polynomial ring over a polynomial ring in finitely many variables and show that growth function associated to the variables and the Frobenius satisfies a linear recurrence. We introduce the concept of Gelfand-Kirillov base for a finitely generated algebra over the prime field of characteristic p, where p is prime, and show its existence for the polynomial ring. (Received August 17, 2021)