1147-11-780 **Myrto Mavraki***, myrtomav@northwestern.edu, and **Laura DeMarco**. *Arithmetic equidistribution, dynamics and elliptic curves.* Preliminary report.

Bogomolov's conjecture (now a theorem following work of Zhang and Ullmo) concerns the geometry of points with small canonical height on abelian varieties. In joint work with Laura DeMarco, we prove an analogous result in the setting of families of products of elliptic curves. This extends theorems by Masser and Zannier in the theme of unlikely intersections. A key step in our proof is establishing an equidistribution result. In this talk, I will discuss this result as well as a generalization of it obtained recently. I will also describe some applications of our work towards a Bogomolov-type extension of a recent result by Barroero and Capuano. Finally I will pose analogous questions in dynamics. This is joint work with Laura DeMarco. (Received January 28, 2019)