MATILDE LALIN, Université de Montréal
Remarks on the Mahler measure for arbitrary tori

The Mahler measure of a Laurent polynomial P is defined as the integral of $\log|P|$ over the unit torus with respect to the Haar measure. For multivariate polynomials, it often yields special values of L-functions. We consider a variation of the Mahler measure where the defining integral is performed over a more general torus. We focus our investigation on two particular polynomials related to certain elliptic curve E and we establish new formulas for this variation of the Mahler measure in terms of $L'(E, 0)$. This is joint work with my summer student T. Mittal.