Atelier « Cycles algébriques et modules »
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The Mahler measure of elliptic curves

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The Mahler measure of a multivariable polynomial or rational function P is given by the integral of $\log|P|$ where each of the variables moves on the unit circle and with respect to the Haar measure. In 1998 Boyd made a systematic numerical study of the Mahler measure of many polynomial families and found interesting conjectural relationships to special values of L-functions of elliptic curves. We will discuss some recent advances on Boyd's conjectures.

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