

Séminaire de théorie des nombres
(Séance exceptionnelle en collaboration avec le GEPBD)

Le 16 Septembre 2010 à 14h15

**Kronecker double series and the
dilogarithm**

Exposé de Andrey Levin
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Résumé : This talk can be treated as motivation for the study of elliptic multiple polylogarithms. The result is very concrete : in the spirit of Zagier's conjecture I express the value at $s = 2$ of the ζ -function of the Hilbert class field of an imaginary quadratic field as a determinant of values of the Bloch-Wigner dilogarithm of some *explicit* algebraic numbers. The main technical tool is the elliptic $(1, 1)$ -logarithm. I hope that a better understanding of multiple elliptic polylogs makes it possible to generalize this result for all integer values of s .