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**Marie-Jose Bertin, Amy Feaver, Jenny Fuselier and Matilde Lalin\***

([mlalin@dms.umontreal.ca](mailto:mlalin@dms.umontreal.ca)), Mathématiques et statistiques, Université de Montréal, CP 6128, succ. Centre-ville, Montreal, Quebec H3C 3J7, Canada, and **Michelle Manes**. *Mahler measures of some K3 surfaces*. Preliminary report.

We study the Mahler measure of the three-variable Laurent polynomial  $x + 1/x + y + 1/y + z + 1/z - k$  where  $k$  is a parameter. The zeros of this polynomial define (after desingularization) a family of  $K3$ -surfaces. In favorable cases, a singular  $K3$ -surface is obtained and the Mahler measure is related to its  $L$ -function. This was firstly studied by Marie-Jose Bertin. In this talk we present some new formulas. (Received December 03, 2011)