

The UIC Algebraic Geometry Seminar

DU BOIS INVARIANTS OF SINGULARITIES AND A QUESTION OF BASS

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If the Picard group of a Noetherian ring R is equal to that of $R[t]$, then it stays the same for polynomial rings over R in any number of variables. Bass asked if the same is true for the Grothendieck group of vector bundles, or more generally for any algebraic K-group. I will report on joint work with Cortinas, Walker and Weibel that answers this question; it turns out that the cohomology of the du Bois complexes appears as a summand in the K-groups, and classical computations of du Bois invariants of semiquasihomogeneous surface singularities over the rationals provide examples for which the answer is "no".

SEO 636

Thursday, September 6th
4:00 p.m.

<http://www.math.uic.edu/~coskun/f2007alggeom.html>