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# ASSOCIATED FORMS IN CLASSICAL INVARIANT THEORY

Jarod Alper

Australian National University

## Abstract

There is an interesting map which assigns to a homogeneous form  $f$  on  $C^n$  of degree  $d$  with non-vanishing discriminant, a certain form on  $C^n$  of degree  $n(d - 2)$ . It was conjectured in a recent paper by M. Eastwood and A. Isaev that all absolute classical invariants of forms on  $C^n$  of degree  $d$  can be extracted from those of forms of degree  $n(d - 2)$  via this map. This surprising conjecture was motivated by the well-known Mather-Yau theorem for isolated hypersurface singularities. I will report on joint work with A. Isaev which settles this conjecture in full generality and proves a stronger statement in the case of binary forms.

**Date :** Thursday, November 13, 2014

**Time:** 17:00

**Place:** IMBM Seminar Room, Boğaziçi University South Campus