

The inverse problem of tensorial invariant theory

Jan Draisma

September 13, 2006

EIDMA SEMINAR COMBINATORIAL THEORY

Given a group H acting on an algebra T , classical invariant theory asks for a description of the subalgebra T^H consisting of all elements fixed by H . The ‘inverse problem’ is the following: characterise those subalgebras A of T for which there exists a group H such that $A = T^H$. The adjective ‘tensorial’ in the title refers to the particular algebra T that we will be working in.