

## **An algebraically independent generating set for the orthogonal action with Seshadri Slice lemma**

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We use Seshadri slice lemma to compute an algebraically independent set of generators of rational invariants for the orthogonal action on a specific vector space of three dimension polynomials  $H$ . Namely,  $H$  includes at least once the vector space of dimension one harmonic polynomials. A precise knowledge of the invariant field of such an action group has several application in physics, particularly to describe orbit spaces of tensors. The case of piezoelectricity tensors is studied as an example.