

Minimal Generating Sets for Coordinate Rings of Representations

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Abstract

We will first define the moduli space of algebraic group valued representations of finitely presented groups. Then we will briefly describe how non-commutative rings influence the structure of the coordinate ring of these moduli spaces. Lastly, we will illustrate this general relationship by constructing minimal generating sets of the coordinate rings of these moduli spaces in some special cases.

Keywords: algebraic group, moduli space, non-commutative ring.