

## Symmetries, integrability and module of logarithmic vector fields

Jacky Cresson and Jordy Palafox

### SUMMARY

The aim of this article is to describe connexions between some dynamical properties of the module of logarithmic vector fields associated to an algebraic variety and their geometrical meaning. In particular, we obtain relations between integrability of logarithmic vector fields, freeness and invariance of the algebraic variety under a symmetry group.

**Keywords:** Symmetries, integrability, logarithmic vector fields

**AMS Classification:** -

<sup>1</sup>IPRA, Université de Pau et des Pays de l'Adour  
email: [jordy.palafox@univ-pau.fr](mailto:jordy.palafox@univ-pau.fr), [jacky.cresson@univ-pau.fr](mailto:jacky.cresson@univ-pau.fr)