

RATIONALLY INTEGRABLE VECTOR FIELDS AND RATIONAL MULTIPLICATIVE GROUP ACTIONS

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In this talk we characterize the correspondence between the rational action of the multiplicative group on algebraic varieties and certain derivations that we call rationally integrable via the exponential map, this generalizes the usual description of the regular actions of the multiplicative group on affine varieties in terms of semisimple derivations with integers eigenvalues.

Reference

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2. E. G. Koshevoi, Birational representations of multiplicative and additive groups, Sib. Math. J. 8(6) (1967) 1016–1021.