

On Invariants of Complex Filiform Leibniz Algebras

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ABSTRACT

The paper intends to survey the subject of the title for an audience of mathematicians not necessarily expert in the areas of commutative algebra and algebraic geometry. It is devoted to the isomorphism invariants of low dimensional Complex filiform Leibniz Algebras under the action of the general linear group (“transport of structure”). The description of the field of invariant rational functions in low dimensional cases is presented.

Keywords: field of invariant function, group action, Leibniz algebra, orbit.
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