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An introduction to associative geometry with applications to integrable systems

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Abstract

The aim of these notes is to provide a reasonably short and "hands-on" introduction to the differential calculus on associative algebras over a field of characteristic zero. Following a suggestion of Ginzburg's we call the resulting theory *associative geometry*. We argue that this formalism sheds a new light on some classic solution methods in the theory of finite-dimensional integrable dynamical systems.

Contents

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