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Non-commutative derived moduli prestacks. (English) Zbl 07759057
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Summary: We introduce a formalism for derived moduli functors on differential graded associative algebras, which leads to non-commutative enhancements of derived moduli stacks and naturally gives rise to structures such as Hall algebras. Descent arguments are not available in the non-commutative context, so we establish new methods for constructing various kinds of atlases. The formalism permits the development of the theory of shifted bi-symplectic and shifted double Poisson structures in the companion paper [27].

MSC:
14A22 Noncommutative algebraic geometry
14A30 Fundamental constructions in algebraic geometry involving higher and derived categories (homotopical algebraic geometry, derived algebraic geometry, etc.)
14D20 Algebraic moduli problems, moduli of vector bundles

Keywords:
derived algebraic geometry; noncommutative algebraic geometry; moduli theory

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