Preface

This special issue of the *Proceedings of the Estonian Academy of Sciences* includes selected papers based on presentations made at the 4th Workshop “Algebra, Geometry and Mathematical Physics”, held at the Institute of Mathematics, University of Tartu, on 9–11 October 2008. Workshops “Algebra, Geometry and Mathematical Physics” (AGMP) started in 2005 within the framework of the Baltic–Nordic Network and since then have already had three scientific meetings, held at Tallinn University of Technology (Eugen Paal, chair), Lund University (Sergei Silvestrov, chair), and Chalmers University of Technology and Göteborg University (Alexander Stolin, chair). The 4th AGMP Workshop was devoted to new developments in the theory of quantum deformations and noncommutative structures with applications to theoretical physics. A total of 38 talks were delivered at the Tartu AGMP meeting, and the programme included new results in quantum integrable systems, noncommutative geometry, extended supersymmetry, $q$-deformed differential calculus, operads methods, deformations in general relativity, ternary algebras, as well as some other new ideas.

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