

Graduiertenkolleg

Experimentelle und konstruktive Algebra



Kolloquiumsvortrag

Mittwoch, 21. Januar 2015, 14:00 Uhr bis 15:30 Uhr, Hörsaal SeMath

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Tensor categories arising from limit Lie algebras

The representation theory of the classical simple Lie algebras $\mathfrak{g}_n = sl(n)$, $o(n)$ or $sp(2n)$ is well-known. By the Theorem of Weyl, any finite-dimensional \mathfrak{g}_n -module is semisimple. But if we consider the corresponding limit Lie algebras $\mathfrak{g} = \varinjlim \mathfrak{g}_n$, any finite-dimensional module is trivial and infinite-dimensional ones are in general not semisimple. The notion of an integrable module provides an approximation to finite-dimensional modules in the non-semisimple setting. We want to investigate some interesting categories which are closed under taking tensor products and whose objects are integrable \mathfrak{g} -modules.

Wir laden alle Interessierten herzlich ein.