

Pozvánka

na seminář skupiny Metody algebry a funkcionální analýzy v aplikacích

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q -Analog of Gelfand–Graev basis for the noncompact quantum algebra $U_q(\mathfrak{u}(n,1))$

Abstract:

For the quantum algebra $U_q(\mathfrak{gl}(n+1))$ in its reduction on the subalgebra $U_q(\mathfrak{gl}(n))$ an explicit description of a Mickelsson–Zhelobenko reduction algebra $Z_q(\mathfrak{gl}(n+1), \mathfrak{gl}(n))$ is given in terms of the generators and their defining relations. Using this Z-algebra we describe Hermitian irreducible representations of a discrete series for the quantum algebra $U_q(\mathfrak{u}(n,1))$ which is a real form of $U_q(\mathfrak{gl}(n))$. Namely, an orthonormal Gelfand–Tsetlin basis is constructed in explicit form.

Seminář se koná ve středu 29. 9. 2010 v 10:00 ve 112.

Severin Pošta