Sommerfeld Theory Colloquium

Prof. Gleb Arutyunov

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R-matrix Quantization of the Ruijsenaars-Schneider Models

I describe an algebraic scheme for quantizing the Ruijsenaars-Schneider models in the R-matrix formalism. It is based on a special parametrization of the cotangent bundle over GL(n,C). In new variables the standard symplectic structure is described by a classical (Frobenius) r-matrix and by a new dynamical $\bar{r}$-matrix. Quantizing these r-matrices, I will exhibit the quantum L-operator algebra and construct its particular representation corresponding to the Ruijsenaars-Schneider system. I will also indicate a couple of open problems.

Wednesday, 21 November 2018, 16:15h, Room A348/349, Theresienstr. 37/III

Prof. I. Sachs