Pure Mathematics Seminar

Yangian approach to finite W-algebras

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A finite W-algebra is certain associative algebra attached to a pair $(\mathfrak{g}, e)$, where $\mathfrak{g}$ is a complex semisimple Lie algebra or a classical Lie superalgebra and $e \in \mathfrak{g}$ is an even nilpotent element. It is a generalization of the universal enveloping algebra $U(\mathfrak{g})$.

Finite W-algebras for the general linear Lie algebras $\mathfrak{gl}(n)$ were described in terms of Yangians (a class of Hopf algebras) by J. Brundan and A. Kleshchev. J. Brown, J. Brundan and S. Goodwin generalized this approach to the Lie superalgebras $\mathfrak{gl}(m|n)$.

We study finite W-algebras for the queer Lie superalgebra $Q(n)$ and discuss Yangian approach to finite W-algebras.

It is a joint work with V. Serganova.

Date: **Friday, April 1, 2016**
Time: **3:00 pm**
Place: **Edinburg:** MAGC 1.302, **Brownsville:** UBLB 2.206

The talk will delivered live at the *Edinburg* campus and will be streamed to the Brownsville campus

Coffee and cookies will be served.

For further information or for special accommodations, please contact Dr. Sergey Grigorian via email at [sergey.grigorian@utrgv.edu], or Dr. Alexey Garber at [alexey.garber@utrgv.edu], or visit the webpage http://www.utrgv.edu/math/news-events/seminars/puremath/index.htm