DWF Metroplex
Algebraic Geometry, Algebra & Number Theory
AGANT Seminar
The event is a joint venture of UT Arlington,
Texas Christian University and the University of North Texas

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“An Alternating Analogue of U(𝔗ₙ) and its Representations”

Friday Oct 18, 2019
3:40*- 4:40 pm
PKH 105

Refreshments served before the seminar in PKH 105.
*Note that the start time is an estimate and depends on when the faculty meeting concludes.

Abstract:
The universal enveloping algebra of a Lie algebra \( g \) is of the utmost importance when studying representations of \( g \). In 2010, V. Futorny and S. Ovsienko gave a realization of \( U(\mathfrak{g}) \) as a subalgebra of the ring of invariants of a certain noncommutative ring with respect to the action of \( S_1 \times S_2 \times \cdots \times S_n \), where \( S_j \) is the symmetric group on \( j \) variables. With some connections to Galois Theory, an interesting question is: what would a similar object be in the invariant ring with respect to a product of Alternating groups? We will discuss such an object and some results about its representations and how they relate to \( U(\mathfrak{g}_n) \) representations. This is based on the work in my recent preprint arXiv:1907.13254.

For more information, see the UTA Math Department’s Seminar Page: https://www.uta.edu/math/events/seminars
Contact Professor Vancliff for more information.