

# Invariant theory of skew polynomial algebras

*Tuesday, 19 December 2023 11:40 (50 minutes)*

Traces are a classical tool in (commutative) invariant theory. When studying invariant subalgebras of non-commutative algebras, traces also play an essential role. In this talk, for skew polynomial algebras, we provide a generalization of the classical formula that expresses the trace series of an automorphism as the reciprocal of the reverse characteristic polynomial of it. We then use this generalization to study ‘good’ automorphisms and ‘good’ invariant subalgebras of skew polynomial algebras. This talk is based on joint work with W. Frank Moore.

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