**Department of Mathematics and Statistics Colloquium**

## *Symmetries of Polynomial Roots*

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Abstract: The work of 19th century mathematician Evariste Galois shows that roots of polynomials have inherent symmetries. These symmetries are encoded as permutations of the roots, and they reveal many important properties of the polynomial. In this talk, we will discuss some of these properties, the history of Galois' work, and we will end with recent results obtained by the speaker's undergraduate researchers in the area of computational Galois theory.

**Wednesday, October 12 at 3:45 in Roop 103**

**refreshments at 3:30**