**Department of Mathematics and Statistics Colloquium**

# *Torsion Points of Elliptic Curves*

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Abstract: An elliptic curve is a geometric object with an especially rich arithmetic structure. These curves are involved in applications that vary from Wiles' proof of Fermat's Last Theorem to secure web browsing, and the challenge of working with them has captured the interest of mathematicians from Weierstrass to Serre. Despite their complexity, elliptic curves and their basic properties may be defined using only high-school algebra, and many important questions can be stated with little additional background. For this reason, they are in a superb position to provide an accessible glimpse of modern mathematics.

**Monday, April 16 at 3:50 in Roop 103**

**Refreshments at 3:30**