Mathematics, Statistics, and Computer Science **@ UIC**

Graduate Student Colloquium

Poncelet's theorem and the group law of an elliptic curve

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Abstract: Poncelet's theorem is a beautiful result of the classical projective geometry: for conics C and D, if there is an n-gon inscribed in C and circumscribed around D, then there is such an n-gon having a given point of C as a vertex. An elliptic curve, on the other hand, is a one-dimensional Abelian variety, which is basic but important in algebraic geometry. The aim of this talk is to see how Poncelet's theorem follows from the group law of an elliptic curve.

Wednesday, March 20 at 5:00 PM in 636 SEO