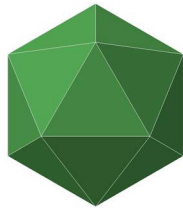


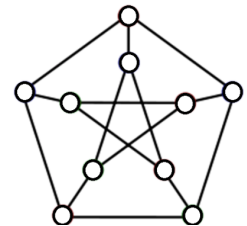


Department of Mathematics 2017–18 Colloquium Series Colloquium Announcement

Igor Dolgachev, University of Michigan
The Petersen Graph and the Icosahedron



This talk will discuss relationships between two fascinating objects: the regular Icosahedron, and the Petersen graph. The Icosahedron has been known since antiquity. The Petersen graph is familiar as a useful example in graph theory; it is less known that it is realized in projective geometry via a Desargues configuration of 10 lines and 10 points, and as such it is related to the theory of algebraic surfaces and Cremona transformations. Each has a large symmetry group: the symmetric group S_5 in the case of the Petersen graph and the alternating group A_5 in the case of the Icosahedron. The same symmetry of other objects in algebraic and hyperbolic geometry relates them to the Petersen graph and the Icosahedron.



Date: Thursday, September 14, 2017

Time: 4:00–5:00 pm

Location: Alavi Commons (6625 Everett Tower)
Main Campus
Western Michigan University

Refreshments will be served beginning at 3:50 pm.

For more information about the Department Colloquium Series visit wmich.edu/math/colloquium. Email inquiries may be directed to gene.freudenburg@wmich.edu.