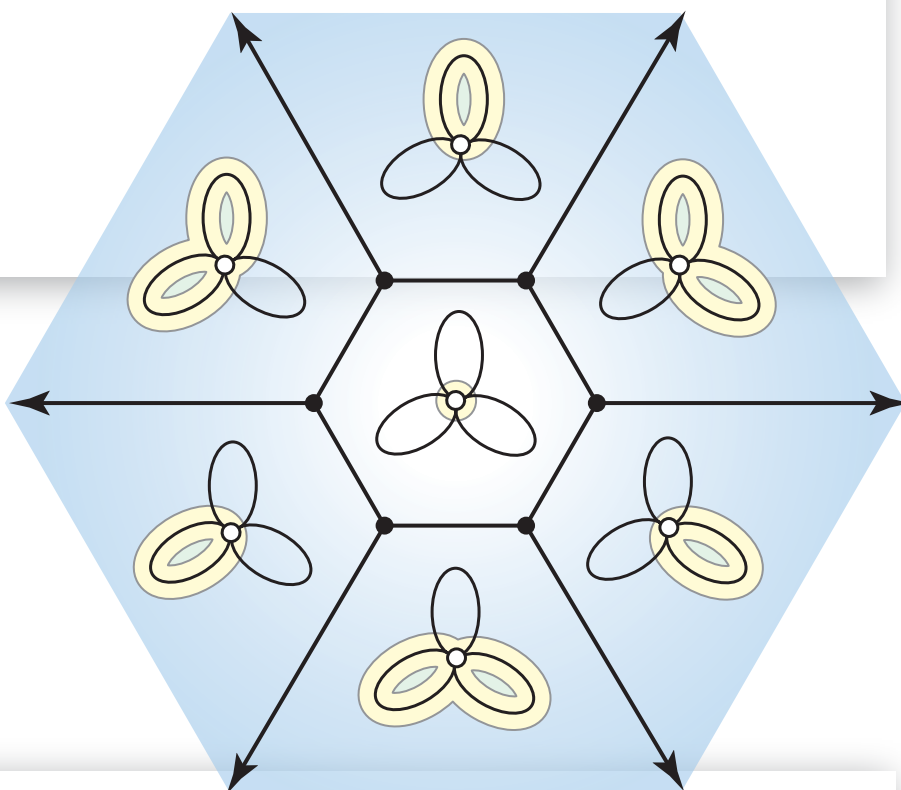
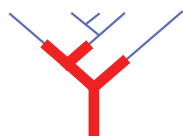


Announcing for Spring 2014

MATH 636 (15613) - Advanced Combinatorics & Graph Theory

Dr. Stefan Forcey

MWF 3:20PM - 4:10PM



Ideas and open questions we will cover come from modern combinatorial techniques, intersections with other areas of mathematics, and applications. We'll choose topics from the following:

- | | |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| New techniques: | <ul style="list-style-type: none">-the theory of species,-extremal, asymptotic and/or probabilistic methods-graph polynomials, eigenvalues of graphs. |
| Intersections with other math: | <ul style="list-style-type: none">-Algebraic combinatorics, Geometric combinatorics-polytopes, operads, Hopf algebras, matroids,-categories, discrete topology and order theory. |
| Applications: | <ul style="list-style-type: none">-Network theory (optimal flow, scheduling, Petri nets, Shannon capacity)-combinatorial games (Chess, Sim)-combinatorial biochemistry (polyhexes and benzenoids)-phylogenetic trees |

The texts are all free online. For more info see: <http://www.math.uakron.edu/~sf34>

