

Geometry, Groups and Dynamics/GEAR Seminar  
(held at the Illinois hub of GEAR )

**Monday August 25 at 3 pm, 243 Altgeld Hall**

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Spectral Networks and harmonic maps

Abstract: I will describe some geometric objects called "spectral networks." Concretely, a spectral network is a collection of paths drawn on a Riemann surface, carrying certain discrete decorations and obeying certain local rules. I will also describe an application of spectral networks to the computation of harmonic maps into symmetric spaces (as a special case of a more general application to solutions of Hitchin equations). The story is mainly joint work with Davide Gaiotto and Greg Moore; it arose out of the study of certain 4-dimensional supersymmetric quantum field theories.

[Video](#)