

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

**12:00 pm, Thursday, April 7, 2016, 243 Altgeld Hall**

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Vortex Moduli Spaces and the Space of Holomorphic Maps

Abstract: The space of holomorphic maps from a closed Riemann surface to complex projective space is of great physical interest. This space naturally corresponds to the space of (gauge classes of) solutions to the vortex equations on the surface. In this talk I will present my past work on strengthening the correspondence so that it is an isometry at some asymptotic region. Such a result encourages us to prove Baptista's conjectural formula on the  $L^2$  volume of the space of maps, generalizing Speight's earlier result on the case for Riemann spheres.

[Video](#)