From Rubik to Escher to Security:
Symmetry from Scratch

Symmetry is evident in many forms from ancient architecture to classical art; however, not as obvious is the mathematical theory of symmetry behind modern applications, such as Rubik's Cube, the art of M. C. Escher, and the security of financial transactions on the Internet. These three topics are not as unrelated as they may initially seem to be. During the lecture, the mathematical ideas behind symmetry will be developed from scratch and illustrated with pictures and numerical examples.

Institute for Mathematics and its Applications
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September 19, 2013 / 7:00 p.m.

Malcolm Moos Health Sciences Tower, 515 Delaware Street SE • Room 2-650
University of Minnesota, Minneapolis

2013-2014 IMA Public Lectures

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Brian Conrad received his Ph.D. degree under the guidance of Andrew Wiles at Princeton. Since 2008, he has been a professor of mathematics at Stanford University, working on problems involving symmetry that emerges from number theory.

For more information: 612-624-6066 • www.ima.umn.edu

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University of Minnesota
400 Lind Hall
207 Church Street, SE
Minneapolis, MN 55455

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