2013-2014 IMA Public Lectures

Mathematics in Modern Architecture

April 29, 2014 / 7:00 p.m.

FIFTH ANNUAL ARNOLD FAMILY LECTU Helmut Pottmann

King Abdullah University of Science and Technology and the Vienna University of Technology Institute for Mathematics and its Applications

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2-650 Moos Tower • 515 Delaware Street SE East Bank, University of Minnesota, Minneapolis

Mathematics in Modern Architecture

Many of today's most striking buildings are nontraditional freeform shapes. While using current modeling tools to digitally design freeform geometry is well understood, fabrication on the architectural scale is a big challenge, providing a rich source of research topics in geometry and geometric computing. Pottmann will provide an overview of recent progress in the emerging field of architectural geometry, discuss its relation to contemporary research in geometry and computer graphics, and illustrate the shift of mathematical research into architectural practice.



Helmut Pottmann is a professor of applied mathematics at King Abdullah University of Science and Technology in Saudi Arabia and a professor of geometry at Vienna University of Technology. His research interests are in applied geometry and visual computing with a recent focus on geometric computing for architecture and manufacturing.

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

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