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Department of Mathematics
Public Lecture
MATH IS KEY

Cosmic Shadows and a Fifth Dimension



Shadow patterns are all around us. We drive through them on the way to work and swim among them in pools. Similar patterns are also cast throughout the universe by the gravitational fields of matter and black holes. This talk unveils some of the cosmic and mathematical secrets of these mysterious and beautiful patterns.

Interestingly, the shadow patterns cast by microscopic black holes touch on a rather deep question. Is there a fifth dimension? In other words, is there an extra dimension of physical space beyond length, width, and height? If so, how would we know it is there? If true, this provocative idea would profoundly impact our perception of the natural world, analogous to how we no longer think of the earth as flat.

Tuesday, April 8, 2014

4:30 p.m.

MATH 175

150 N. University St.

Purdue University, West Lafayette, IN

PURDUE
UNIVERSITY

A reception in the Math library lounge (MATH 304)
will immediately follow the lecture.