COLLOQUIUM

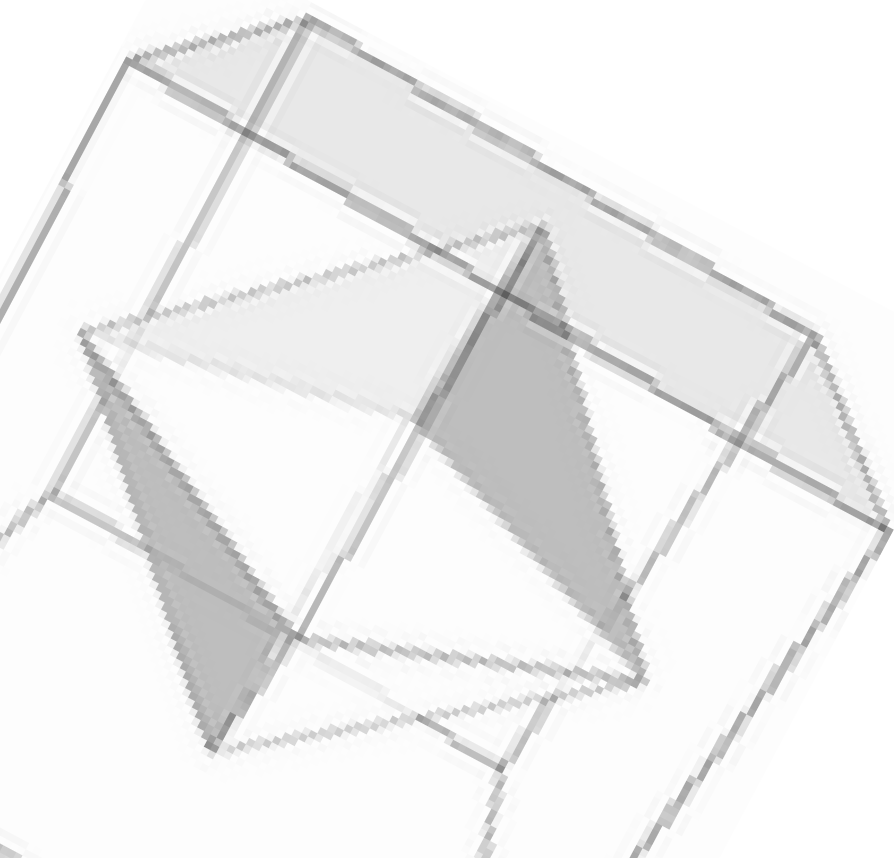## WAYNE DEETER

11-5-15

NECKERS 156 | 3PM

RECEPTION IMMEDIATELY FOLLOWING IN THE MATH LIBRARY

PLEASURES, CHALLENGES AND NEW RESULTS ON POLYHEDRA

[ABSTRACT]

If we attempt to enclose a circle, or a sphere --- or a hypersphere in any number of dimensions --- with an intersection of planes or hyperplanes (in general terms, within a polyhedron), we will have only an approximation of a sphere. We ask instead, "How closely can any polyhedron-enclosure of the sphere fit?" How many of its faces would be identical? How many different types of faces would this roundest polyhedron have? Today there are no known formulas to specify the roundest polyhedra

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