

Wednesday, September 30, 2009

4:00–4:50 p.m.

SAS 2229

# Unfolding polyhedra

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Most of us, as children, saw those paper or cardboard cutouts, which we could call “foldouts,” whose edges glue to form (boundaries of) 3-dimensional convex polyhedra. Just how did anyone figure out how to make them? Given a 3-dimensional convex polyhedron, does there always exist a foldout in the plane? What about higher dimensions? These questions have surprising answers, depending on the precise meaning of “foldout.” This talk will be **accessible to all undergraduates**, with tons of pictures to help us foray into four dimensions (though most of the talk will be in three or fewer), and absolutely no formulas.

NCSU Society for Undergraduate Mathematics

## SUM Series

Mathematics and pizza!