

**Meeting:** 1003, Atlanta, Georgia, MAA CP B1, MAA Session on My Favorite Demo: Innovative Strategies for Mathematics Instructors, I

1003-B1-429      **Edward W. Welsh\*** ([ewelsh@wsc.ma.edu](mailto:ewelsh@wsc.ma.edu)), c/o Department of Mathematics, 577 Western Avenue, Westfield, MA 01085. *Building Mathematical Skills with Lego Bricks.*

Lego bricks are an anisotropic medium. Specifically, vertical measurement units (brick heights, or bricks) are 20% larger than horizontal units (stud widths, or studs). For aesthetic or structural reasons, constructions often consist of bricks oriented in two or more directions, using so-called SNOT (Studs Not On Top) building techniques. These SNOT techniques provide dramatic hands-on demonstrations of the use of ratios, congruent and similar triangles, the Pythagorean Theorem, and even some number theory applications. This is a participatory talk; building kits will be available to audience members who come early and sit in the front of the room. (Received September 15, 2004)