COLLEGE *of* CHARLESTON MATH CLUB

MATHEMATICAL EXPLORATIONS SEMINAR SERIES

[Seminar talks designed for undergraduate students]

Symmetry and Moonshine
Professor Elizabeth Jurisich

Wed., Feb. 17, 2016 at 3:10 pm, 104 RS Small

Since the late 1970's mathematicians have been studying the sometimes mysterious connections between particular number theoretic functions, simple groups, and mathematical physics (such as string theory). Such correspondences have come to be know as "Moonshine" phenomena. Recently, due to its connection to functions counting physical states, attention has focused on the group named Mathieu 24 (M24) a large simple group with nearly 250 million elements. Starting with some examples accessible to linear algebra students, I will give some examples of groups that are symmetry groups of geometric objects.

It would be an interesting student project to create computer, or 3D printed models of some of the surfaces of recent interest, with part or all of the group action demonstrated. This talk is related to work that I did during my sabbatical.
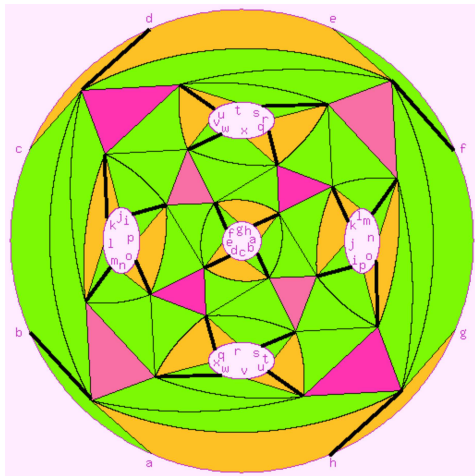
Please join us for cookies in the Math Lounge:
346 RS Small at 2:45 pm.