

1106-H1-2798 **Susan Goldstine*** (sgoldstine@smcm.edu) and **Ellie Baker**. *Tiling the Beaded Torus*.

A bead crochet bracelet consists of a narrow tube of seed beads sewn together to form an uninterrupted hollow torus. Creating symmetric color patterns on bead crochet bracelets is challenging because the beads form a continuous spiral along the length of a bracelet, making it exceedingly difficult to align design motifs uniformly. An elegant way to approach this aesthetic puzzle is instead to create symmetric, periodic patterns in an infinite plane of beads following simple rules that allow the patterns to wrap around bead crochet tori. In this talk, we will illustrate several powerful methods for designing bracelets tessellated by congruent tiles in multiple colors and present examples of bracelets produced by these techniques. (Received September 16, 2014)