## 1056-C1-2010 Karl H. Schaffer\* (karl\_schaffer@yahoo.com), P.O. Box 8055, Santa Cruz, CA 95061. Dancing in Mathematical Circles.

Although choreographers may employ mathematical principles when creating dances, overt attention is seldom given to the mathematics by either the audience or the choreographer. We will examine the mathematical elements in several of the author's recently choreographed dances in which mathematical ideas were embedded purposefully and with the intent that the mathematics be at least somewhat visible to the audience. These include the show "Harmonious Equations," directed by Keith Devlin, which celebrates important equations of math and physics in song, prose, and dance; and "The Magic Circle," a dance for outreach performances to schools, both premiering in the past year. New work to be outlined includes "dancer tessellations," which the author is currently working on, and "Switch," a recent dance about genetic engineering which plays with the 24 permutations of 4 dancers in a line. (Received September 22, 2009)