

1167-53-16

Jane M McDougall*, Math & CS Department, Colorado College, 14 E Cache La Poudre, Colorado Springs, CO 80903, and **Sohair Abdullah** and **Lauren Stierman**. *Rosette Harmonic Mappings and Minimal Surfaces*.

The familiar plane-curve hypocycloids can be modified using hypergeometric functions, leading to the rosette harmonic mappings. A fundamental feature of a rosette harmonic mapping $f = h + \bar{g}$, is a mirror image property of the analytic functions g and h on the boundary of the unit disk, where h and g are the analytic functions in the canonical decomposition of f . This gives rise to boundary values of the harmonic mappings that sometimes include arcs of constancy. The corresponding minimal surfaces however are not Jenkins-Serrin surfaces, and may even produce embedded triply periodic minimal surfaces. In this talk we will explore the boundary behavior of the rosette minimal surfaces and describe their symmetries. (Received January 19, 2021)