

1145-M5-1414      **T. T. Craig\***, 251 Vesta Drive, Myrtle Beach, SC 29579. *The Coastal Paradox.*

Teaching in a coastal community, we had the unique opportunity to take our K-12 Coastal Carolina University Math Teachers' Circle to the beach and challenge our teachers to measure our coast to introduce them to fractal geometry. During this session, teachers make conjectures on how measurement of complex shapes changes as we use different measurement tools. This activity was interactive and provided our teachers with an opportunity to get their hands sandy while exploring the Coastline Paradox. The participants first measure hula-hoops with multiple methods and discover an infinite series that is convergent, which is intuitive to most. Next teachers are given a variety of materials and challenged to compute the length of the South Carolina coastline. The session closes with teachers learning how the coastline connects to fractals like the Koch snowflake. (Received September 21, 2018)