

1135-37-1142      **Mark C McClure\*** (mcmcclur@unca.edu). *Computational adventures in complex dynamics*. Preliminary report.

Complex dynamics has long been a field filled with vivid illustrations. In this presentation, we'll discuss some of the images I've generated through my collaboration with Jane, as well as some of the computational issues that can arise when generating images arising in original research. Examples include the iteration of Weierstrass Elliptic functions and the iteration of rational functions with neutral orbits but no attractive orbits. Generation of these types of images is not a simple matter of numerical power but involve challenges for computer algebra as well. (Received September 19, 2017)