## 1125-N5-2033 Beth Schaubroeck\* (beth.schaubroeck@usafa.edu). Using applications to understand complex analysis concepts.

In this talk, we will first discuss incorporating interactive labs in a complex variables course. Then we will discuss how application labs at the end of the semester provide a good review of much of the course material. In examining Dirichlet problems, students review the concepts of harmonic functions and the orthogonality of the real and imaginary parts of a function, as well as mapping properties of basic functions. While learning about iteration of functions, students review powers and roots of complex numbers and the amplitwist interpretation of the derivative. I suggest using these projects as both capstone and review material in an undergraduate complex analysis course. (Received September 19, 2016)