1145-H5-2386 **Patricia Vela*** (pvela@agnesscott.edu). *Making the "M" in STEM salient through a robotics activity.*

Why do some students stare at a problem hopelessly while other students have fun with that same problem? George Polya proposed that experienced problem solvers employed heuristics to stimulate their mathematical thinking processes. That is, although experienced problem solvers might not know initially how to solve a problem, heuristics enable them to engage with the problem. Similarly, Papert (1980) reported observing problem solvers engaged with Turtle Geometry, an animal-like robot, using heuristics identified by Polya when attempting to solve problems – even though they were not taught or asked to use Polya's heuristics. In this talk, I will discuss whether students indeed resort to Polya's identified heuristics when engaged with a robotics-based task which requires the use of concepts from Algebra 2, Trigonometry, and Pre-Calculus. Furthermore, I will present student's affective reactions to mathematics in this technological setting. (Received September 25, 2018)