Teaching and Learning of Mathematics

Department of Mathematics
University of West Georgia

Tuesday April 23, 2019

4:30

Conference Room, 200 Education Center, COE

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It is not imaginary any more: an activity to visualize imaginary numbers

Abstract:

The imaginary number \( i \) (\( \sqrt{-1} \)) is an abstract concept for nearly everyone in mathematics classes. Rene Descartes (1596-1650) originally used the term *imaginary number* although Rafael Bombelli (1526-1572) defined it before him. Even if some regard imaginary numbers as untrue, the application of these numbers in mathematics, physics, and engineering is enormous. In this presentation we revisit “The Gamow Problem” employing dynamic geometry software to investigate and envision the imaginary numbers in a pre-service teacher education mathematics environment. This activity may well be utilized in mathematics classes to point out the applications of imaginary numbers in real life situations and motivate the students at the same time.

*All are welcome.*