Undergraduate Mathematics Seminar

Department of Mathematics, Fall 2020



The Origin of the Logarithm:

And how it catalyzed the scientific revolution

Dr. Patrick Cooper

Assistant Professor, Duquesne University

Date: Tuesday, September 22

Time: 12:00 - 12:50 pm, EDT

Location: Zoom, ID: 935 1032 7072

Dr. Cooper (aka Coop) is an assistant professor of theoretical physics at Duquesne University who spends his time thinking about the math behind our quantum picture of reality. He thinks about strings and gravitons and glue balls but mostly thinks a lot about what it really means to be made out of quantum stuff. Most recently he has acquired a hobby of learning and sharing the history of our



journey attempting to describe the world with math. He's a Pitt math alumni and an Integration Bee finalist (2nd place no big deal). The way we learn about logarithms as young mathematical epsilons, is in their relationship to the exponential function. On the other hand, the history of logarithms has no exponents in sight. The invention of the logarithm is more closely related to the invention of a piece of technology like the calculator than it is to the invention a new mathematical function. This new technology emerged simultaneously with the scientific revolution and this was no accident. Come see how the invention of the logarithm as a tool, made Kepler, Newton and ultimately physics as a rigorous, predictive science possible!

SPEAKER(S) FOR NEXT WEEK:

Dr. Iván Ramírez Zúñiga



Organized by: Derek Orr, Tom Everest, Jeremiah Morgan, and Jeff Wheeler