

# **Old Dominion University Department of Physics**

## Colloquium

## Tuesday, November 29, 2022

## "A Whirlwind History of Maxwell's Equations"

Dr. Kathy Joseph

#### Abstract:

Have you ever wondered how and why James Clerk Maxwell created his famous equations? In this colloquia, Kathy Joseph author of "The Lightning Tamers" and creator of the popular YouTube channel "Kathy Loves Physics and History," tells the fascinating tale of how the scientists before Maxwell that inspired him as well as how he inspired others to create Maxwell's equations as we know them today. This is an in-depth connected history where you will see how Coulomb, Oersted, Ampère, Sturgeon, Faraday and Hamilton inspired Maxwell and then how Maxwell inspired Heaviside, Gibbs and Hertz and the world.

Kathy Joseph splits her time between writing her next book, making documentary videos based on her books for her YouTube channel, and giving talks about the history of science and the importance of context for learning science.

Kathy has earned four higher education degrees in physics, engineering, and science education, but she feels as if her real education came from spending 12 years as a public high school physics teacher. She is an alumnus of the University of Chicago, Penn State, and the University of Utah.

### **Presentation By Zoom:**

Topic: Kathy Joseph Colloquium Time: Nov 29, 2022, 03:00 PM Eastern Time (US and Canada)

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All interested persons are cordially invited to attend.