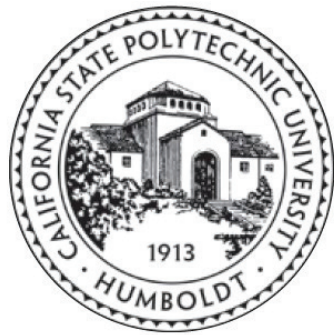




DEPARTMENT OF MATHEMATICS
Fall 2025 MATH Colloquium Series

Linear Algebra and Quantum Mechanics

Dr. Ken Owens

**Department of Mathematics
Cal Poly Humboldt**

How do we use linear algebra to express Schrödinger's equation? Everyone is welcome as I will start from the beginning.

HEAT EQUATION

$$\frac{\partial y}{\partial t} = \alpha \frac{\partial^2 y}{\partial x^2}$$

SCHRÖDINGER EQUATION

$$i \frac{\partial y}{\partial t} = -\frac{\hbar}{2m} \frac{\partial^2 y}{\partial x^2}$$

WAVE EQUATION

$$\frac{\partial^2 y}{\partial t^2} = v^2 \frac{\partial^2 y}{\partial x^2}$$

THURSDAY
Oct. 23, 2025

4:00 PM
BSS302

FOR MORE INFO GO TO <https://math.humboldt.edu/get-involved/mathematics-colloquium>

**We cordially invite you to the PRE-COLLOQUIUM TEA in BSS#312
at 3:30 PM**