



DEPARTMENT OF MATHEMATICS

SPRING 2023

# 79TH KIEVAL LECTURE



## REVOLUTIONS IN THE HEAVENS AND THE EARTH: THE STORY OF TRIGONOMETRY



WITH DR. GLEN VAN BRUMMELEN

Trigonometry has been intimately associated with our explorations of the universe for over two millennia. Passing through several major cultures, for most of history it was the engine of astronomy. In the last four centuries (a mere blink of an eye), trigonometry was flipped on its geometrical head, pulled down to the earth, and converted into a modeling tool in science. The introduction of imaginary numbers married trigonometry to a surprising spouse, the exponential functions, allowing us to explain phenomena from the vibration of springs to the changing levels of chemicals in our bloodstream.



**Thursday, April 20, 2023**

**7:00 PM**

**SCI B 135**

FOR MORE INFO GO TO [HTTPS://MATH.HUMBOLDT.EDU/GET-INVOLVED/KIEVAL-LECTURE](https://math.humboldt.edu/get-involved/kieval-lecture)