

COLLOQUIUM

Physics and Mathematics in Music

Jason Bono
Fermilab

May 30, 2018
4:00 p.m. - Wilson Hall, One West

Music is nearly universal in human culture and yet it remains mysterious. In order to help answer some of music's fundamental questions, we will briefly turn to archeology and early history before examining some of music's salient features from a physical and mathematical perspective. Principles rooted in physics and pure mathematics will provide a link to intercultural qualities of musical tone and melody to the deep role that symmetry plays in human perception, thus shedding light on the questions that we set out to answer. To enhance clarity and familiarity, various concepts will be illustrated with animations and sound bites.