



Colloquium

February 14, 4:05 p.m. (9th Period)
(Little 368)

Speaker: Jason Johnson

Title: Mathematics and Music: The Ghost of Bach

Abstract

In this talk we will explore the setting and the difficulty intrinsic in identifying a piece of music utilizing only its musical content. We will see both mathematical and musical examples that will elucidate how techniques from machine learning and statistics may be brought to bear to determine authorship of a piece of a music. Moreover, we will examine how well-formed this question is and the limitations of utilizing only information contained in musical compositions. While we are likely able to discern gross differences with ease such as what style or period a piece belongs to, finer differences may simply fail to exist. We may not be able to adjudicate between Bach and his contemporaries using only musical data; Is there a quintessential Bach contained in his works or does the Ghost of Bach remain elusive?