

BERNOULLIS TAFELRUNDE

GRADUATE STUDENT SEMINAR

Monday December 7th 12:15-13:00

Virtual seminar

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Universität Basel

Musical mathematics

ABSTRACT

From ancient Greek times music has been a mathematical art, a science even. The connection between music and mathematics might have faded in the last few hundred years (and our perception of the typical musician today couldn't be farther away from that of a "scientist"). Still, the physics of sound and our understanding of music are deeply determined by the mathematics behind it. In this talk we will explore a few mathematical aspects of music, like why we tune instruments the way we do, why we have 12 different notes and not more or less, and how this relates to mathematics of Fourier series and continued fractions.