

Mathematics Department Colloquium

Connections between Mathematics and Music

By Dr. David Wright of Washington University in St. Louis

Thursday October 4th at 2:30 in Durham Science Center Room 111.

Come early to get a seat.

Abstract: It has been observed that mathematics is the most abstract of the sciences, music the most abstract of the arts. Mathematics attempts to understand conceptual and logical truth and appreciates the intrinsic beauty of such. Music evokes mood and emotion by the audio medium of tones and rhythms without appealing to circumstantial means of eliciting such innate human reactions. Therefore it is not surprising that the symbiosis of the two disciplines is an age old story. The Greek mathematician Pythagoras noted the integral relationships between frequencies of musical tones in a consonant interval; the 18th century musician J. S. Bach studied the mathematical problem of finding a practical way to tune keyboard instruments. In this talk, some musical and mathematical notions will be brought together.

Bio: David Wright is Professor Emeritus and former Chair in the Department of Mathematics at Washington University in St. Louis. He received his Ph.D. in Mathematics from Columbia University. A leading researcher in the fields of affine algebraic geometry and polynomial automorphisms, he has produced notable publications in these areas and has been an invited speaker at numerous international mathematics conferences. He served on the Council of the American Mathematical Society, and chaired its Committee on Education. As a musician, David is an arranger and composer of a cappella music, where his work often integrates the close harmony and barbershop styles with jazz, blues, gospel, country, doo-wop, and contemporary a cappella. He serves as Associate Director of the award winning male chorus Ambassadors of Harmony, from St. Charles, Missouri. David designed and teaches a university course in Mathematics and Music.

