

# COLOQUIO IMA

## INICIATIVA POR LAS MATEMÁTICAS Y LAS ARTES

Miércoles, 25 de septiembre de 2013

11:00 h., **Aula Naranja** (ICMAT, Campus de Cantoblanco)

**David Wright**

Washington University in St. Louis

Mathematics and Music

### Resumen:

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.

