MIT Music and Theater Arts



NEW SUBJECT

21M.359 Studies in Musical Composition, Theory and Analysis

MUSIC AND MATHEMATICS

Selected topics in music analytic and compositional methods, mainly for twentieth-century and original music, using a diversity of approaches drawn from mathematics. Analysis includes application of set theory and abstract algebra for pitch and metric classes, graph theory for network design, Markov chains for generic styling, and information theory for an atemporal association-spatial grammar. Composition technique incorporates algebraic topology for systems structures, stochastic models for event-over-space approaches, and string rewriting systems for modifying existing structures. Peter Whincop

T/R | 2:30-4pm | Rm. 4-152