Meeting: 1001, Evanston, Illinois, SS 23A, Special Session on Mathematical Techniques in Musical Analysis

1001-00-409 **Ian Quinn*** (ian.quinn@yale.edu), Department of Music at Yale University, 143 Elm Street, PO Box 208310, New Haven, CT 06520-8310. The Algebra of Minimal Voice Leading among Triads of All Species. Preliminary report.

Taking cues from both modern neo-Riemannian and nineteenth-century (Hugo) Riemannian theory, we explore the algebraic characterization of minimal voice leading — usually in which just one voice moves by just one semitone — among perfect (major/minor), diminished, and augmented triads. The problem, which admits a quirky solution in which either (i) each diminished or augmented triad has two mathematical images or (ii) each mathematical representation of a diminished or augmented triad seems to have a partner with the same "musical" image, forms a point of departure for a consideration of the music-theoretic meaning of certain algebraic entities. (Received August 31, 2004)