1067-00-1961 Robert Wannamaker* (rwannama@calarts.edu), The Herb Alpert School of Music, California Institute of the Arts, 24700 McBean Parkway, Valencia, CA 91355. The Rational Number System as a Generator of Musical Form.

The structures of multilayered divisive polyrhythms are modeled in ways that elucidate their perceptible features and relate them to properties of the rational number system. Frequency ratios ordered by size are presented as a harmonic manifestation of similar structures. Illustrative examples are drawn from the music of American composer James Tenney (1934-2006). (Received September 22, 2010)