

# THERE IS BUT ONE FUNDAMENTAL

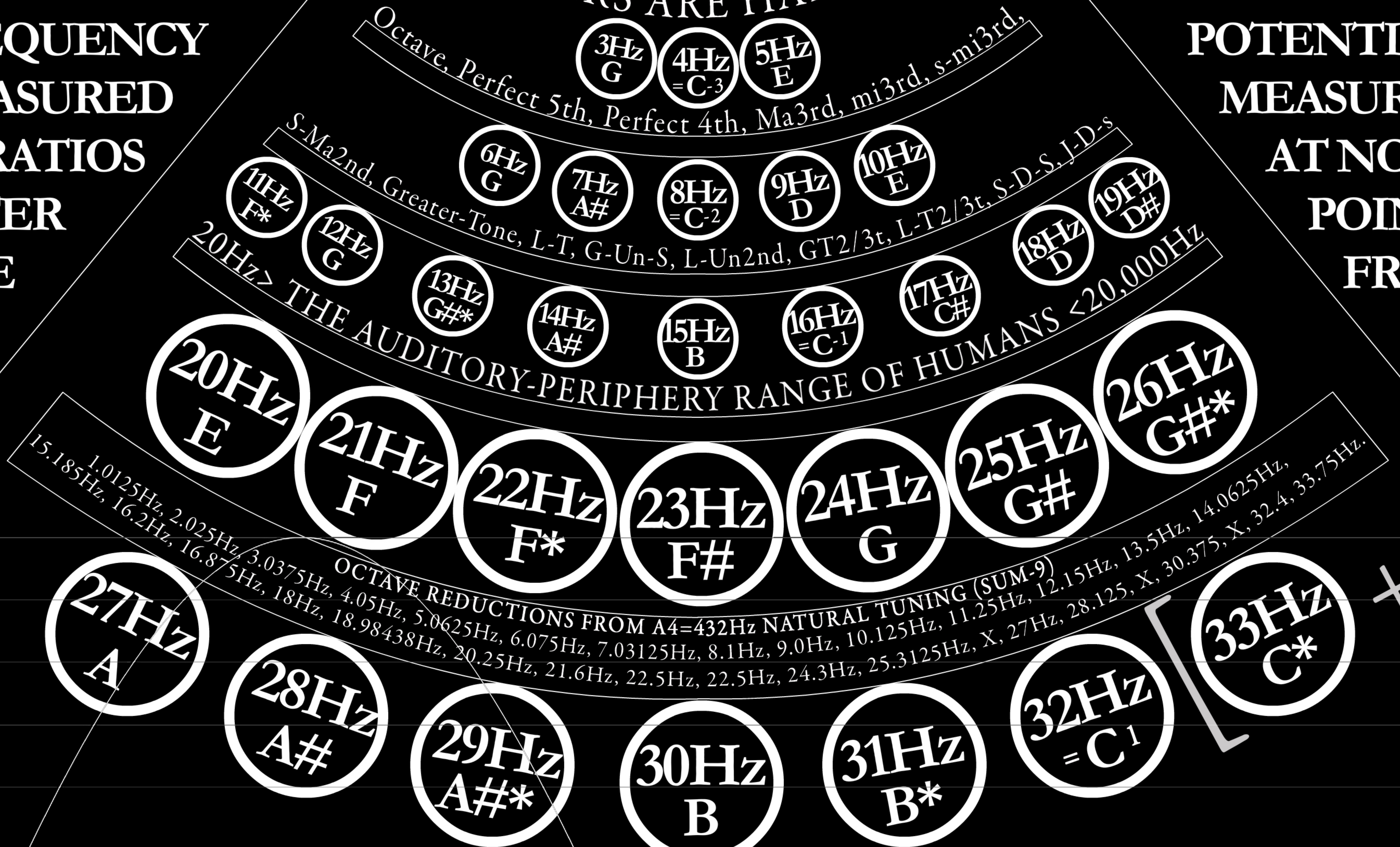
HERTZ  
= C<sup>-5</sup>  
TONE

**OVERTONES ARE THE (+) INTEGER MULTIPLE OF THE FUNDAMENTAL FREQUENCY MEASURED IN RATIOS AFTER THE 1**

**HARMONICS PARTIAL INTERVALS PROVIDE A BASIS OF HARMONY POTENTIALS MEASURED AT NODE POINTS FROM 1**

**NUMBERS ARE HARMONY**

Sequential integer numbers from the one to sixteen are the essence of Western Music harmony



THESE ARE THE HERTZIAN OCTAVE REDUCTIONS FROM A4=432Hz (NATURAL-SUM-9) DOWN TO THE LOWEST FUNDAMENTAL INTEGER/WHOLE-NUMBER "ONE" WHICH IS INDEED THE TONE OF C-5 (FIVE OCTAVES BELOW C1). THE CONSECUTIVE INTEGER RATIO OF FREQUENCIES 1-32Hz ARE THE C-HARMONIC PARTIALS SERIES OF THE OPEN VIBRATING MUSICAL STRING OF TWO FIXED POINTS. THERE ARE A TOTAL OF 64 POSSIBLE HARMONICS FROM THE COMPLEX TONE OF THE VIBRATING FIXED MUSICAL STRING, THESE HARMONICS GOVERN THE LAWS/PHYSICS OF MUSIC AND TUNING POTENTIAL WITH A4=432.081Hz PRECISE-TEMPERAMENT-TUNING (by R. GRANT) EXCITING THE HIGHEST ORDER OF SYMPATHETIC RESONANCE RESULTING IN THE LONGEST POSSIBLE CHORDAL-HARMONY SUSTAIN & RICHEST HARMONIC SOUNDBOARD EXPERIENCE ON CONCERT PIANO.

C=1.02197486445508Hz OCTAVE REDUCTION FROM A4=440Hz 12-TONE EQUAL-TEMPERAMENT (Eight near-absent harmonic-partials 13, 20, 25, 26, 28, 30, 31 and 32)  
 C=1.003392578125Hz OCTAVE REDUCTION FROM A4=432Hz 12-TONE EQUAL-TEMPERAMENT (Four near-absent harmonic-partials 26, 28, 29 and 31)  
 C=1.0125 OCTAVE REDUCTIONS FROM A4=432Hz NATURAL-FACTOR-9 (Three near-absent harmonic-partials 26, 29 and 31)  
 C=1.004255Hz OCTAVE REDUCTION FROM A4=432.081Hz PRECISE-TEMPERAMENT (Two near-absent harmonic-partials 28 and 31)  
 Near absent harmonic-partials are those that stray too far from the integer Hz (1-32). Harmonic-Partials from 32-64 are predominantly microtonal variances of a non-musical nature.  
 All these harmonic partial tones combined with an instruments open/closed resonance dynamic contribute to the unique timbre and texture of "complex tone" of the fixed vibrating note.