Analytic Study of Harmonic Intervals



Analytic Study of Harmonic Intervals (click to enlarge ☞)

"**Analytic Study of Harmonic Intervals**" by Dr. Chester Mann. This well written and easy to read and understand detailed analysis of harmonics and partials goes well beyond where Miller, Helmholtz and Tyndall left off. There is a seeming vast mystery in notes, intervals and their interacting harmonics with subtractive (difference) and additive (summation) tones. Dr. Mann delves deeply into this mystery with math and a razor sharp clarity of mind and words. One does not need math to read this book - but it helps. I HIGHLY recommend this book if you are exploring the mysteries of music, sound and vibration. 8.5" x 11" perfect binding. Download pdf of this book here: https://svpwiki.com/pdffiles/Analytic-Study-of-Harmonic-Intervals.pdf 🗗

Table of Contents

- 1. Tones and intervals
 - A. Pitch and frequency

- B. Addition, subtraction, and measurement of intervals
- C. Timbre and partials
- D. The acoustic spectrum of an interval
- E. Periodic motion
- F. Loudness and intensity
- G. Phase relations in complex tones
- H. Vibrato: periodic pulsation

2. The audible phenomena of harmonic intervals

- A. Interference: basic formulation
- B. Interference: beats
- C. Modulation
- D. Aural harmonics and combination tones
- E. Aural responses to complex tones
- F. Loudness profile of the typical aural spectrum
- G. Masking

3. The aural spectra of commensurable intervals

- A. Fundamental aspects
- B. The loudness index
- C. Pairs of spectral tones
- D. The indexes of coinciding spectral tones
- E. Minimum-index tones
- F. Significant tones of the aural spectrum
- G. Primary coincidences
- H. Coincidence of significant spectral tones
- I. The basic range
- J. Discernible intervals
- K. The "third tone"

4. The interpretation of intervals

- A. Interrelating commensurable intervals
- B. Choosing coordinates when X0 and yo are not given
- C. Conjoint intervals
- D. The aural interpretation of indiscernible
- E. Beats and the point of division
- F. Nuclei
- G. Recognizability of tunings
- H. Pseudo nuclei
- I. Accuracy of tunings
- J. Acceptability of tunings
- K. Consonance and dissonance

Bibliography Index of symbols Index of figures, tables, and plots Subject index

ChatGPT reviews this book in simple terms [12/29/24]: [1] https://chatgpt.com/share/67714d55-aae8-800d-8591-2926792df038 **AI Interpretations of SVP** Acoustic Acoustic Impedance **Acoustic Levitation** acoustics American Acoustical Society **Bioacoustics** Handbook of Acoustics Harmonics Oscillation **Overtone Series Principles of Acoustics** quantum acoustics Sound Vibration 17.20 - Acoustic Levitation 8.25 - Triune Acoustic Forces