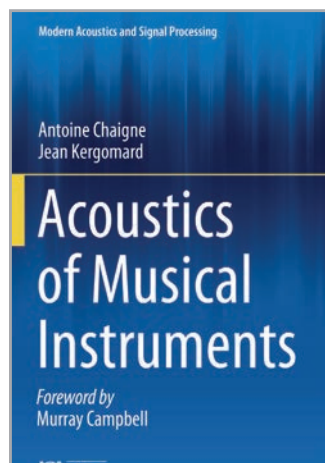


# Acoustics of Musical Instruments

Series: *Modern Acoustics and Signal Processing*



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- ▶ Casts new light on the physics of musical instruments
- ▶ Includes up-to-date research published in the field of musical acoustics in the last fifteen years

- ▶ Outlines new methods developed in other fields such as complex modes and nonlinear normal modes
- ▶ Represents the only book on the physics of musical instruments to include practice exercises, catering to a broad audience of graduate students and researchers
- ▶ Brings the essential *Acoustique des instruments de musique* to an English audience for the first time

This book, the first English-language translation of *Acoustique des instruments de musique, Second Edition*, presents the necessary foundations for understanding the complex physical phenomena involved in musical instruments. What is the function of the labium in a flute? Which features of an instrument allow us to make a clear audible distinction between a clarinet and a trumpet? With the help of numerous examples, these questions are addressed in detail. The authors focus in particular on the significant results obtained in the field during the last fifteen years. Their goal is to show that elementary physical models can be used with benefit for various applications in sound synthesis, instrument making, and sound recording. The book is primarily addressed to graduate students and researchers; however it could also be of interest for engineers, musicians, craftsmen, and music lovers who wish to learn about the basics of musical acoustics.

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