Center for Environmental & Applied Fluid Mechanics

"Aerodynamic Sound at Low Mach Numbers"

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The sound of fluid at low Mach number is a special research area that poses diverse applications not only in aerodynamics but also in bio-medical or biological fluids. The related Mach numbers are in the order of $O(10^{-2})$ or even less and therefore the compressibility effects are substantially low but still play an important role in many aspects. A hybrid method of splitting the hydrodynamic field and the acoustic field is of our present interest and attention is given to the linearized perturbed compressible equations (LPCE). A few selected applications of aerodynamic sound, such as trailing-edge scattering noise and the sound of the human larynx, are discussed.

Spring 2023 CEAFM Seminar Series

April 21, 2023 ✦ 3:00 PM ✦ Gilman Hall 50

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