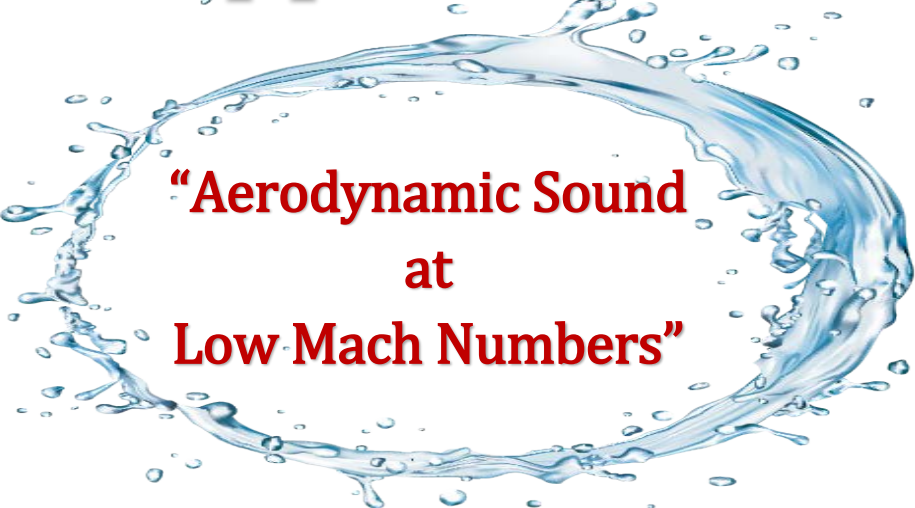


Center for Environmental & Applied Fluid Mechanics



“Aerodynamic Sound at Low Mach Numbers”

Young J. Moon
Korea University
Mechanical Engineering

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 CEA FM Seminar Series
April 21, 2023 ✦ 3:00 PM ✦ Gilman Hall 50