Other - Enabling Process Innovation Through Computation (EPIC) Seminar Series

Flows with Suspended Particles

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Patrick F. Taylor Hall 1106
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Abstract:

Particulate flows are very commonly encountered in science and technology, but their understanding description is far from well developed. After a brief description of the most widespread approaches for the (more-or-less) direct numerical simulation of fluid-particle interactions, the talk will describe the basis of the Physalis approach to the problem. Some considerations on the numerical implementation of the method on GPU-based computers will be offered, followed by a description of some applications to particles in turbulence, spinning particles and flows in porous media.

Attend online at: HTTP://CONNECT.LSU.EDU/EPIC-SEMINARS

Speaker's Bio:

A. Prosperetti is the C.A. Miller Professor of Mechanical Engineering at the Johns Hopkins University and the Berkhoff Professor of Applied Physics (part-time) at the University of Twente in the Netherlands. He received a BS in Physics from the University of Milan (Italy) and a doctorate in Engineering Science from Caltech. His main interests are in the area of multiphase flow, including bubbles, drops and particles. He is the Editor in Chief of the International Journal of Multiphase Flow and the author of the recent monograph “Advanced Mathematics for Applications” published by Cambridge University Press.

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