

Department of Mathematics

University of Houston

Scientific Computing Seminar

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Numerical simulations of surface acoustic wave (SAW) actuated cell sorting and enantiomer separation

Thursday, Dec. 6, 2012

3:25 PM- 3:50 PM

Room 646 PGH

Abstract:

Particle sorting in a sample is a growing need in many applications, including basic cell biology, cancer research, clinical diagnostics, tissue engineering and drug design in pharmacology. We are concerned with mathematical modeling and numerical simulations of surface actuated cell sorting, as well as enantiomer separation using surface acoustic wave generated vorticity patterns. This is accomplished using the Finite Element Immersed Boundary (FE-IB) method.

This seminar is easily accessible to persons with disabilities. For more information or for assistance, please contact the Mathematics Department at 743-3500.