

Department of Mathematics

University of Houston

## Scientific Computing Seminar

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### High resolution human body computational model for bioelectrical impedance analysis

Thursday, Sep. 11, 2014

1:30 PM- 2:30 PM

Room 646 PGH

**Abstract:** In this work we presented the technology for high-resolution efficient numerical modeling of bioimpedance measurements. This technology includes 3D image segmentation, adaptive unstructured tetrahedral mesh generation, finite-element discretization, and the analysis of simulation data. High resolution anatomically correct model based on Visible Human Project data was created. Sensitivity field distributions for various electrode measurement schemes were computed and compared.

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