Mathematics and CS Seminar

Extended Viscous Fluid Simulation with Two-Way Coupling and Parameter Identification

Tetsuya Takahashi
The University of North Carolina at Chapel Hill

Host: Chris Wojtan

Viscous fluids are common materials as frequently seen in daily life, and simulating their characteristic behaviors has been required for various applications, such as video games and virtual reality. Regardless of recent advances, however, behaviors of simulated viscous fluids do not necessarily agree with the real-world counterparts. To fill the gap between simulated fluids and real ones, in this talk, I will present the two-way coupling method for viscous fluids and solid objects which has been neglected in spite of the importance. I also talk about a parameter identification framework which enables for automatic parameter tuning based on example videos to better approximate the real fluid flows.

Friday, May 3, 2019 11:00am - 12:00pm
Big Seminar room Ground floor / Office Bldg West (I21.EG.101)

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