



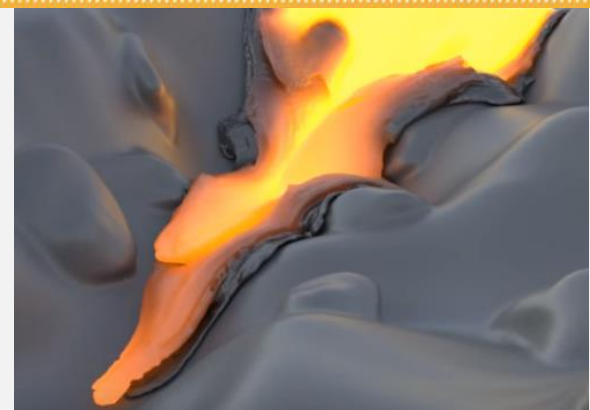
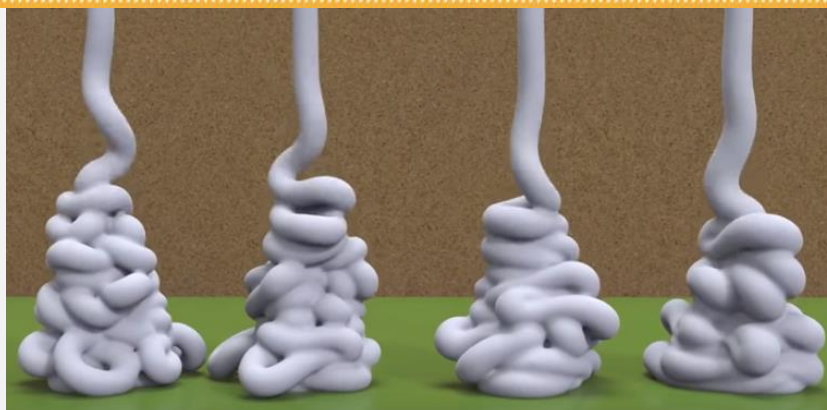
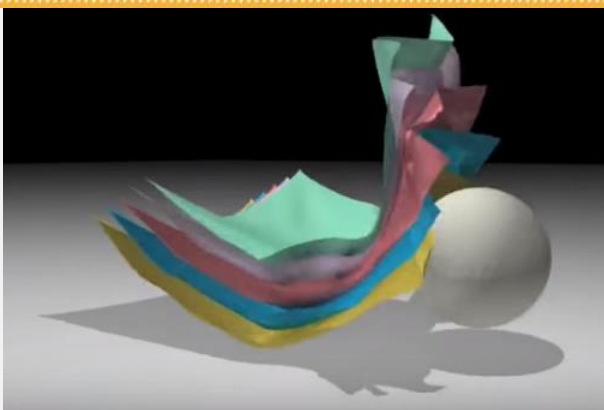
Frontiers in Science Lecture

Joseph M. Teran

Professor of Mathematics
University of California, Los Angeles

Scientific Computing for Movies and Beyond

Sept. 18, 2017, 6-7 PM | Room 1005, Roger A. and Helen B. Krone Engineered Biosystems Building (EBB) | 950 Atlantic Dr NW, Atlanta, GA 30332
LIGHT REFRESHMENTS SERVED BEFORE LECTURE



Simulations of virtual materials in movie special effects, as well as virtual surgery, require applications of scientific computing for solid and fluid mechanics problems. Movie special effects and virtual surgery demand physically realistic dynamics for things like water, smoke, fire, and soft tissues, for which new algorithms are required.

Joseph M. Teran will discuss the simulation techniques required and share recent results, including the algorithm used to simulate the dynamics in the Disney animated film “Frozen.”

About the Speaker

Joseph M. Teran is a professor of applied mathematics at the University of California, Los Angeles. His research

focus is numerical methods for partial differential equations arising in classical physics.

Teran received a 2011 Presidential Early Career Award for Scientists and Engineers from NSF and a 2010 Young Investigator Award from the Office of Naval Research. In 2008, Discover Magazine named Teran one of the 50 “Best Brains in Science.”

About Frontiers in Science Lectures

Lectures in this series are intended to inform, engage, and inspire students, faculty, staff, and the public on developments, breakthroughs, and topics of general interest in the sciences and mathematics. Lecturers tailor their talks for nonexpert audiences.