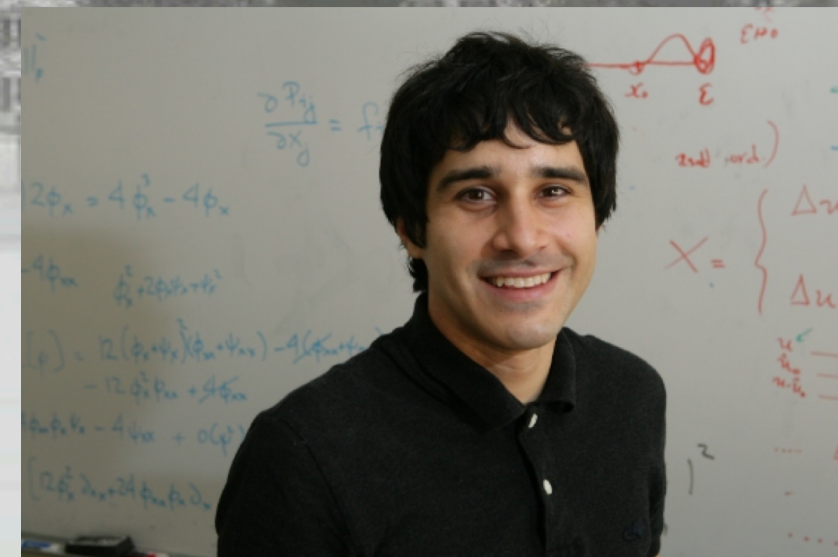


The Reese T. Prosser Mathematics Lecture Series
Presents

Snow Business: Scientific Computing in the Movies and Beyond

Abstract: New applications of scientific computing for solid and fluid mechanics problems include simulation of virtual materials in movie visual effects and virtual surgery. Both disciplines demand physically realistic dynamics for materials like water, smoke, fire, and soft tissues. New algorithms are required for each area. Teran will speak about the simulation techniques required in these fields and will share some recent results including: simulated surgical repair of biomechanical soft tissues; extreme deformation of elastic objects with contact; high resolution incompressible flow; and clothing and hair dynamics. He will also discuss a new algorithm used for simulating the dynamics of snow in Disney's animated feature film, "Frozen".

Joseph Teran
Professor of Mathematics
UCLA



Friday 9/14/18
7:00-8:00PM
008 Kemeny Hall
Open to the public