

Florence Bertails-Descoubes – Inria, France

Talk title	Predictive simulation for films, fashion, and physics
Biography	<p>Florence Bertails-Descoubes is a tenured researcher at Inria in Grenoble, France, heading the ELAN research team in physics-based simulation. She completed in 2006 a PhD on hair simulation at INP Grenoble, which was awarded the French SPECIF prize in Computer Science. In 2006-2007, F. Bertails-Descoubes was a postdoctoral researcher at the University of British Columbia, before joining Inria in September 2007 as a permanent researcher in the BiPop research team, specialized in nonsmooth mechanics. In 2017 she has founded the ELAN research team at Inria, positioned across Computer Graphics and Computational Mechanics. F. Bertails-Descoubes's research interests deal with the modeling and the simulation of complex mechanical objects, mainly for applications in digital movies and virtual prototyping. She is particularly interested in the modeling of nonlinear slender elastic structures (such as rods and plates) and the discrete handling of dry frictional contact for simulating divided matter (such as hair or granulars). She regularly presents her work at premier international conferences in Computer Graphics such as ACM SIGGRAPH or Eurographics, and occasionally in Computational Mechanics and Physics since a few years. In 2014 she received an ERC starting grant to work on inverse elastic design in the presence of frictional contact.</p>