KEYNOTE TALK

TBD

Lights, Camera, Animation! Adaptive Simulation Methods for Training and Entertainment

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Abstract: Physics-based simulations are a critical part of computer animation. This talk will provide a brief overview of new adaptive reduced methods that use rigid motion to speed up interactive and offline simulations of real-world phenomena. This includes merging rigid bodies at contacts, and rigidifying elastic bodies and shells when they are not deforming. The main challenge how to inexpensively identify when and where parts of a reduced system need more degrees of freedom. Applications and future directions will be discussed.

Speaker Bio-Sketch: Paul G. Kry received his B.Math. in computer science with electrical engineering electives in 1997 from the University of Waterloo, and his M.Sc. and Ph.D. in computer science from the University of British Columbia in 2000 and 2005. He spent time as a visitor at Rutgers during most of his Ph.D., and did postdoctoral work at INRIA Rhône Alpes and the LNRS at Université René Descartes. He is currently an associate professor at McGill University. His research interests are in physically based animation, including deformation, contact, motion editing, and simulated control of locomotion, grasping, and balance. He co-chaired ACM/EG Symposium on Computer Animation in 2012, Graphics Interface in 2014, and served on numerous program committees, including ACM SIGGRAPH, ACM/EG Symposium on Computer Animation, Pacific Graphics, and Graphics Interface. He is currently an associate editor for Computer Graphics Forum, and for Computers and Graphics. He heads the Computer Animation and Interaction Capture Laboratory at McGill University. Paul Kry is currently the president of the Canadian Human Computer Communications Society, the organization which sponsors the annual Graphics Interface conference. Starting September 2016 Paul Kry served a 3-year term as a director at large on the ACM SIGGRAPH executive committee.