TU TECHNISCHE UNIVERSITÄT WIEN
Institut für Computergraphik und Algorithmen
Arbeitsbereich für Computergraphik

v r vis zentrum für
virtual reality und visualisierung
forschungs-gmbh

G OESTERREICHISCHE
COMPUTER GESELLSCHAFT
AUSTRIAN
COMPUTER SOCIETY

laden gemeinsam zum

GASTVORTRAG

Bart Postma

"Realistic physically-based simulations and real-time computer graphics: a narrowing gap"

Abstract:

Computational Science and Visualization have been the focus of my studies and research for the last several years. The aim of Computational Science is to gain insight into complex systems and natural phenomena by capturing them in computational models and execute these models on the computer. With Visualization I mean computer visualization in the broadest sense, including branches like Computer Graphics and Image Processing. During my talk I visit several of my projects, ranging from cloth simulation and fluid simulation to Deferred Shading and (non-photorealistic) rendering. One of the themes of my talk is how the programmable graphics processing unit narrowed the gap between realistic physically-based simulations and real-time computer graphics.

Biography:

Bart Postma received a BSc and an MSc with highest honor in Computer Science from the University of Groningen, the Netherlands. He has worked mainly in Computational Science and Visualization and how to combine these two fields elegantly and efficiently. His bachelor project evaluated Deferred Shading. His master project optimized fluid simulations based on the relatively new lattice Boltzmann method to the point where large amounts of fluid are simulated in real time. During his time at Groningen he has been a teaching assistant and mentor for several years. He enjoys to make people think and laugh and that people do the same to him.

Datum: 26. September 2014, 10:30 Uhr s.t.
Ort: TU Wien, Favoritenstr. 9, Stiege 1, 5. Stock, Seminarraum E186