VRIPHYS 2015

We are pleased to announce the 12th Workshop on Virtual Reality Interaction and Physical Simulation - VRIPHYS 2015. The workshop is hosted by LIRIS and the Université Lyon 1. It will take place on Nov. 4-5, 2015. Talks will be given in the Computer Science Department located in the Nautibus building of the campus (located in Villeurbanne city, a close suburb of Lyon).

The conference is organized in cooperation with Eurographics. Its goal is to attract high-quality research papers in the domains of dynamic simulation and physical interaction in virtual reality environments. We also welcome papers showing on-going research with promising results and new technology with applications of related focus.

LYON

Lyon is the second largest city in France, located between Paris and Marseille. The city is known for its historical and architectural landmarks and is a UNESCO World Heritage Site. Lyon was historically known as an important area for the production and weaving of silk and in modern times has developed a reputation as the capital of gastronomy in France. It has a significant role in the history of cinema due to Auguste and Louis Lumière.

GALA DINNER

Will be held at **Maison Villemanzy** on Wednesday.

The address: 25 montée Saint-Sébastien, Lyon 1er (Hotel de Ville station, subway A).

From the campus, take tramway T1 (Debourg) or T4 (Hôpital Feyzin Vénissieux, change at Charpennes - Charles Hernu station for subway A (Perrache) and stop at Hotel de Ville station.

Maison Villemanzy

With its amazing views over Lyon from the slopes of the Croix Rousse, its authentic kitchen, clever mix of bistro dishes and lyonnaiseries scoundrels and a full service attention, the House of Christine and William Mouchel offer live delicious step room, on the patio or on the terrace in summer.

12th Workshop on Virtual Reality Interaction and Physical Simulation

VRIPHYS 2O15

November 4-5, 2015

Université Lyon 1 - LIRIS - Lyon, France

WEDNESDAY

TIME	EVENT
8:00 - 9:00 am	Registration & Coffee
9:00 - 9:10 am	Opening & welcome

9:10 - 10:30 am — Technical Session 1: Simulation & Character Motion (Room C5)

- «Quaternion Fourier Transform for Character Motions»
  B. Kenwright.
- «Using Personalized Finger Gestures for Navigating Virtual Characters»
  C. Ouzounis, C. Mousas, C.N. Anagnostopoulos, P. Newbury.
- «Interleaved Cloth Simulation»
  D. Han.

TIME	EVENT
10:30 - 11:00 am	Coffee break

11:00 - 12:00 pm — Keynote 1 (Room C5) - Arjan Egges

12:00 - 1:30 pm — Lunch

1:30 - 3:15 pm — Technical Session 2: Fluids (Room C5)

- «Implicit Incompressible SPH on the GPU»
  P. Goswami, A. Eliasson, P. Franzén.
- «Brownian dynamics simulation on the GPU: virtual colloidal suspensions»
  C.T. Tran, B. Crespin, M. Cerbelaud, A. Videcoq.
- «Evaluation of Surface Tension Models for SPH-Based Fluid Animations Using a Benchmark Test»
  M. Huber, S. Reinhardt, D. Weiskopf, B. Eberhardt.
- «A New Force Model for Controllable Breaking Waves»
  M. Brousset, E. Darles, D. Meneveaux, P. Poulin, B. Crespin.

TIME	EVENT
3:15 - 3:45 am	Coffee break

3:45 - 5:00 pm — Technical Session 3: Interaction & Control (Room C5)

- «Level-of-Detail Modal Analysis for Real-time Sound Synthesis»
  D. Rausch, B. Hentschel, T. Kuhlen.
- «Accurate Contact Modeling for Multi-rate Single-point Haptic Rendering of Static and Deformable Environments»
  T. Knott, T. Kuhlen.
- «Vascular neurosurgery simulation with bimanual haptic feedback»
  J. Dequidt, E. Coevoet, L. Thinès, C. Duriez.

◆ WEDNESDAY...

5:00 - 6:00 pm	Industrial & Framework Session (Room TD8)
7:30 pm	Dinner at Maison Villemanzy

◆ THURSDAY

TIME	EVENT

9:15 - 9:45 am — Work-in-Progress Session (Room C3)

- «SPH for Compressible Flow using Constraint Projection»
  M. Weiler, J. Bender.

9:45 - 11:00 am — Technical Session 4: Model Analysis & Techniques (Room C3)

- «A More Efficient Parallel Method For Neighbour Search Using CUDA»
  D. Morillo, R. Carmona, J.J. Perea, J.M. Cordero.
- «Area Preserving Strain Limiting»
  D. Han.
- «Grid-Free Surface Tracking on GPU»
  N. Chentanez, M. Mueller, M. Macklin, T.Y. Kim.

TIME	EVENT
11:00 - 11:30 am	Coffee break
11:30 - 12:30 pm	Keynote 2 (Room C3) - Jean-Rémy Chardonnet
12:30 - 1:00 pm	Closing & Award (Room C3)
1:00 - 2:00 pm	Lunch Box