CHAIRE D'INFORMATIQUE ET SCIENCES NUMÉRIQUES

Année académique 2014-2015

Pr Marie-Paule CANI

Expressive Modelling: New Advances Towards the Seamless Creation of 3D Content

Humans have always dreamed of expressing shapes and motion, which they did over many centuries through sketching, painting or sculpting. Could digital media be turned into a tool, even more expressive and simpler to use than a pen, to convey and refine both static and dynamic 3D shapes? This international symposium presents some of the most advanced research activities in this direction.

It concludes a series of 8 courses and seminars in the Computer Graphics domain, entitled *Shaping Imaginary Content: from 3D Digital Design to Animated Virtual Worlds.*

Marie-Paule Cani is a Professor of Computer Science at Grenoble Institute of Technology and the scientific leader of Imagine, a common research group of Inria and Laboratoire Jean-Kuntzmann. Her research interests range from geometric modeling to 3D animation, with a focus on expressive tools for the creation of new digital content.

Chaire créée avec le soutien de

Innía

Colloque

Monday 8 June 2015

09h00 Introduction
Marie-Paule Cani, *Collège de France*

09h15 The Media Transition in Expressive Rendering and Modeling
John Hughes, *Brown University, United States*

10h00 Combining Human Interaction with Computation in Creative Graphics Tools
Ariel Shamir, *IDC Herzliya, Israel*

10h45 Break

11h00 Sketching for Customized 3D Printing
Marc Alexa, *T.U. Berlin, Germany*

11h45 Perception, Drawing and Interactive Modelling
Karan Singh, *University of Toronto, Canada*

12h30 Lunch break

14h00 Multimodal interfaces for Shape Exploration: Beyond 2D Sketching
Joaquim Jorge, *University of Lisboa, Portugal*

14h45 Simulation-Guided Creation: Interactive Simulation to Animate and Fabricate your Own Idea
Nobuyuki Umetani, *Autodesk Research, Canada*

15h30 Break

15h45 Personalized Design of Mechanically-Functional Content for 3D Printing
Bernhard Thomaszewski, *Disney Research, Switzerland*

16h30 Towards Sketching and Sculpting Motion. Conclusion
Marie-Paule Cani, *Collège de France*

17h15 Closing

Colloque en anglais. Symposium in English.

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