



## France-Atlanta Workshop: Mathematical Modeling in Cardiovascular Healthcare – Challenges and Perspectives

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Mathematical modeling plays a vital role in science and engineering, enabling a quantitative understanding of complex dynamics in nature and appropriate design in many applications. The role of mathematical and numerical modeling has been critical in quantitative medicine.

Cardiovascular diseases are one of the leading causes of death in Western countries and in particular in France and in the USA. Mathematicians and computer scientists have been working closely with physicians and clinicians to improve the comprehension of the physiopathological dynamics, to help design new therapies and devices and, overall, to enhance the decision-making process in cardiovascular healthcare.

There is a strong collaborative tradition of French and American scientists in this field. This two-day workshop, organized by the **Office for Science and Technology** of the French Embassy to the U.S. and **Emory University**, aims at leveraging one another's' strengths to foster and reinforce transatlantic collaborations on cardiovascular mathematics.

- **When:** October 20-21, 2016

- **Where:**

- Thursday, October 20: Department of Mathematics and Computer Science, Math & Science Building - Room E408, Emory University, 400 Dowman Dr NE, Atlanta 30322
- Friday, October 21: Hurst Conference Room - Room E405, Emory University Hospital, 1364 Clifton Rd, Atlanta, GA 30322

- **Registration**

**Topics will include:**

- Clinical Challenges in Coronary and Aortic Diseases
- Advanced tools of Numerical Modeling in Computational Mechanics for Cardiovascular Diseases
- Perspectives in Quantitative Patient-Specific Analysis

**Confirmed speakers:**

- Dr. Jean-Frédéric Gerbeau, French National Institute for computer science and applied mathematics, (Inria), Paris, France
- Dr. Franck Nicoud, Université Montpellier 2, Montpellier, France
- Dr Romain Chopard, Hospital University Jean-Minoz, Dijon, France
- Dr. Alessandro Veneziani, Department of Mathematics and Computer Science, Emory University, Atlanta, GA, USA
- Dr. Habib Samady, Interventional Cardiology, Emory University Hospital, Atlanta, GA, USA

**About France-Atlanta:**

France-Atlanta: Together Towards Innovation is an annual series of events designed to foster cooperation between France and the U.S. Southeast in the fields of science, business, culture, and humanitarian affairs. Created in 2010 by the Consulate of France in Atlanta and the Georgia Institute of Technology, France-Atlanta welcomes each fall over 3,500 participants for a dynamic, multidisciplinary program of more than a dozen high caliber events centered on innovation. The 7th Annual France-Atlanta will take place October 12-22, 2016, offering workshops, performances, exhibitions, conferences, films, and more. It is made possible with the support of our corporate sponsors : Anne Cox Chambers, Delta-KLM-Air France, Nissan, Raymond F. Schinazi and Family Foundation, and MailChimp.

More information: <http://www.france-atlanta.org/>