

# Computational & Life Sciences/ Center for Comprehensive Informatics Spring 2009 Seminar Series

1/23/2009

3:00pm

**Dr. Alessandro Veneziani**

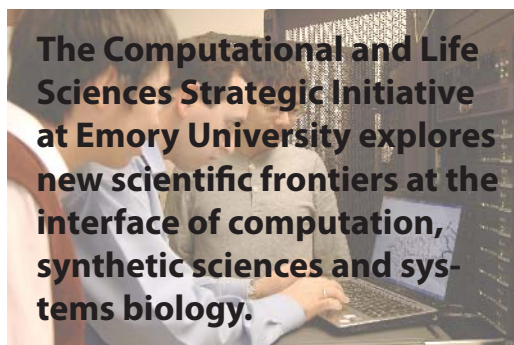
Mathematics, Emory University

Location: Atwood Chemistry Center, Room 240

## “Cardiovascular mathematics: from models to case studies”

### Abstract:

In this talk we illustrate some real case studies in vascular medicine and surgery that we have recently investigated with the support of mathematical models and numerical simulations. We present some examples where our investigation has different purposes, ranging from a better understanding of phenomena of clinical interest to the optimization of surgical procedures. Each example provides the conceptual framework to introduce new mathematical models and numerical methods whose applicability, however, goes beyond the specific case that is addressed. The perspective underlying these research is that a strong integration of medical imaging tools, statistical analysis and numerical modeling can strongly increase informations available to medical doctors for supporting their decisions.



For more information please visit:

[HTTP://CLS.EMORY.EDU/](http://CLS.EMORY.EDU/)

[HTTP://CCI.EMORY.EDU/](http://CCI.EMORY.EDU/)

### CONTACT CCI AT:

1521 DICKEY DR., SUITE 500  
ATLANTA, GA 30322  
PHONE: (404)727-6202  
[HTTP://CCI.EMORY.EDU/](http://CCI.EMORY.EDU/)  
EMAIL: PDUNHAM@EMORY.EDU

### CONTACT CLS AT:

400 DOWMAN DRIVE, SUITE 421E  
ATLANTA, GA 30322  
PHONE: (404)727-5363  
[HTTP://CLS.EMORY.EDU/](http://CLS.EMORY.EDU/)  
EMAIL: CLS@EMORY.EDU



**Computational Science  
& Informatics**



**Synthetic Sciences**



**Systems Biology**



EMORY  
UNIVERSITY