François Grimbert

INRIA, Odyssée Lab
2004 route des lucioles
BP 93
06902 Sophia-Antipolis
France
Webpage: `http://www-sop.inria.fr/odyssee/team/Francois.Grimbert/index.en.html`

Phone: (+33)492387557
Fax: (+33)492387845
email: `Francois.Grimbert@sophia.inria.fr`

Education

Ph.D. Applied Mathematics for Neuroscience, Université de Nice, Feb 2008 (Expected)

M.S. Applied Mathematics for Biology and Computer Vision, École Normale Supérieure, 2004

M.S. Pure Mathematics, Université Paris Sud, 2004

B.S. Pure Mathematics, Université Paris Sud, 2002

Research Experience

Ph.D. student — 2004–2007
Olivier Faugeras — INRIA Sophia-Antipolis
Mesoscopic models of cortical structures.

Research Assistant — 2004
Olivier Faugeras — INRIA Sophia-Antipolis
Bifurcation study of cortical column models.

Research Assistant — 2002
Amaury Lambert — École Normale Supérieure
Probabilistic models for population dynamics.

Teaching Experience

Teaching Assistant, Computer Science, Centre International de Valbonne, 2005–2006

Mathematics tutor, diverse preparatory schools in Paris, 2000–2004

Journal Articles

François Grimbert, Olivier Faugeras (2006), **Bifurcation Analysis of Jansen's Neural Mass Model** *(Neural Computation 18(12): 3052-3068)*

Olivier Faugeras, François Grimbert, Jean-Jacques Slotine (2007), **Stability and Synchronization in Neural Fields** *(accepted for publication in SIAM)*

Romain Veltz, Olivier Faugeras, François Grimbert (2007), **Localized activity patterns in nonlinear continuous n-population, q-dimensional neural networks** *(under review)*

François Grimbert

Conference Posters

NEUROMATH 06, François Grimbert, Olivier Faugeras, **Cortex as a continuum of cortical columns**

NEUROCOMP 06, Olivier Faugeras, François Grimbert, **Two-dimensional multilayer neural field models**

CNS 07, François Grimbert, Olivier Faugeras, Frédéric Chavane, **From neural fields to VSD optical imaging**

CNS 07, Olivier Faugeras, François Grimbert, Jean-Jacques Slotine, **Stability and Synchronization in Neural Fields**

Research Reports *(INRIA Research Reports)*

Olivier Faugeras, François Grimbert, Jean-Jacques Slotine (2007), **Stability and Synchronization in Neural Fields**

François Grimbert (2007), **A brief overview of intracortical circuits**

Olivier Faugeras, François Grimbert (2007), **Bumps in Two-dimensional Neural Field Models**

François Grimbert, Frédéric Chavane (2007), **Neural Field Model of VSD Optical Imaging Signals**

Invited Talks

A Neural Masses Approach to Multilayer Neural Field Equations, *FACETS Meeting, Graz, 2006*

Bumps Problems in a Simple 2D Neural Field Model , *Workshop on Biomathematics and Dynamical Systems, Marseille, 2007*

A neural field approach to VSDOI signals , *DyVA team, INCM, Marseille, 2007*

Mesoscopic scale models for cortical functional signals, *Max Planck Institut, Leipzig, 2007*

Scientific Software

François Grimbert (2007): Matlab program for solving neural field equations.

Théodore Papadopoulo and François Grimbert (2007): parallel C++ program for solving neural field equations.

Service

Ph.D. students representative, INRIA Sophia-Antipolis and Campus STIC 2004–2007

Languages

French (native language), English (fluent), German (good level).