



département  
mia

«Hierarchical Bayesian Models for spatio-temporal data»

Journée RESSTE

Mardi 16 mai 2017

Agro-ParisTech, Amphi Coléou  
16, rue Claude Bernard, 75005 Paris

<http://www.agroparistech.fr/Adresses-et-plans-d-acces,706.html>

**Program**

9h30 **Welcome coffee**

**Morning Session**

*Chair: Eric Parent*

- 9h50 Introduction  
*Denis Allard, BioSP, INRA Avignon*
- 10h00 Data fusion approach for spatial analysis of speciated PM2.5 across time  
*Alan Gelfand, Duke University, NC*
- 11h00 SPDEs and space-time Gaussian random fields: beyond the Matérn covariance model  
*Ricardo Carrizo, équipe de géostatistique, MinesParisTech*
- 11h30 Models and inference for random fields indexed on non-oriented graphs  
*Mike Pereira, équipe de géostatistique, MinesParisTech*

12:00 **Déjeuner offert aux participants inscrits - espace Dubos**

**Afternoon session**

*Chair: Liliane Bel*

- 14h00 A grid-based spatio-temporal model to handle 0-inflated biomass data.  
*Éric Parent with Jean-Baptiste Lecomte, Liliane Bel, Marie P. Etienne, UMR MIA, AgroParisTech*
- 14h30 Composite likelihood strategies for the Bayesian analysis of large hierarchical space-time models  
*Denis Allard (BioSP, INRA), with Lionel Benoit et Grégoire Mariethoz, Université de Lausanne.*
- 15h00 A Bayesian model for joint unmixing, clustering and classification of hyperspectral data  
*Adrien Lagrange, Mathieu Fauvel, Nicolas Dobigeon, Univeristé de Toulouse and DYNAFOR, INRA Toulouse*
- 15h30 The French agricultural soil database: mine of information and headache for statisticians  
*Nicolas Saby, Infosol, INRA Orléans*
- 16h00 General discussion  
*Eric Parent, UMR MIA, AgroParisTech*