Stochastic Methods for the Analysis of NUMerical COdes

Research group sponsored by the French National Center for
Scientific Research

MASCOT NUM aims at coordinating research efforts in developing tools for design, modeling and analysis of computer experiments.

Many techniques of applied mathematics involved : statistics, probability, computer science, numerical analysis, operational research, mathematical physics, . . .

Key milestones for MASCOT NUM :

- ⋆ February 2006, first "non official" meeting in Toulouse;
- ⋆ January 2008, birth of MASCOT NUM;
- ⋆ January 2012, first renewal of the group.

An increasing number of registered members (405 persons)

⋆ Januray 2016 remains an open issue . . . We applied for a second renewal of the group.

Hervé MONOD (INRA, Jouy) should be the next leader.

MASCOT NUM is composed with 7 working groups. These groups regularly organize some thematic days, journal special issues, summer schools, ...

Working groups

- **Design of numerical experiments**
- **Uncertainty and sensitivity analyses**
- **Computer code approximation via metamodels**
- **Probabilistic models**
- **Industrial problems**
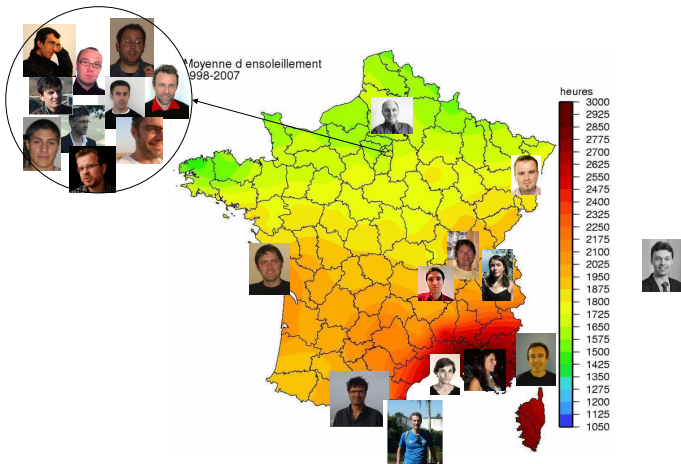- **Environmental problems**
- **Software aspects**

Officers, Board and Council of MASCOT NUM

Board (group leaders) and communication committee

- Academics: Alexandre Janon (Univ. Paris Sud), Clémentine Prieur (Université Grenoble, LJK/MOISE), Luc **Pronzato** (I3S, CNRS Sophia Antipolis);

- Engineering Schools: Julien Bect (SUPELEC, Gif sur Yvette), Olivier **Roustant** (Ecole des Mines de Saint Etienne), Anthony **Nouy** (Ecole Centrale de Nantes);

- Research Institutes: Amandine **Marrel** (CEA Cadarache), Hervé **Monod** (INRA Jouy-en-Josas, Département MIA), Miguel **Munoz**-**Zuniga** (IFPEnergiesnouvelles, Rueil-Malmaison), François **Wahl** (IFPEnergiesnouvelles, Solaize);

- Industrial Companies: Sébastien **Da Veiga** (SNECMA), Bertrand Iooss (EDF R&D, Chatou), Fabien Mangeant (Airbus Group), Nathalie Saint Geours (ITK, Montpellier).

Scientific council

- Jean-Marc **Azaïs** (Université Toulouse 3),
- Gérard **Biau** (Université Paris VI),
- Pierre **Del Moral** (INRIA Bordeaux-Sud Ouest),
- Fabrice **Gamboa** (Université Toulouse 3),
- Josselin **Garnier** (Université Paris VII),
- Olivier **Le Maître** (LIMSI, CNRS),
- Clémentine **Prieur** (Univ. Grenoble, LJK/MOISE),
- Luc **Pronzato** (I3S, CNRS Sophia Antipolis),
- Christophe **Prud'homme** (Univ. Strasbourg),
- Bruno **Sudret** (ETH Zürich),
- Emmanuel **Vazquez** (SUPELEC, Gif sur Yvette).

Moyenne d ensoleillement
1998-2007

heures
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1500
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1350
1275
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1125
1050

MASCOT NUM's partners are public institutions, public labs and companies.

The complete list is available at
http://www.gdr-mascotnum.fr/commitees.html

Get involved : MASCOT NUM has created a club for industrials. For more information you can meet Fabien Mangeant during the conference.

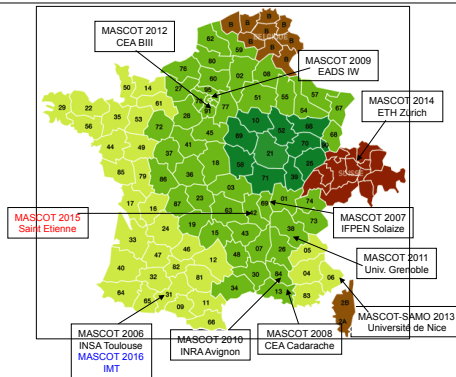MASCOT NUM members, Keep Your Blog active !

`http://mascot-num.blogspot.fr/`

You can put a link to publications of interest for MASCOT NUM users on the following page
`http://www.gdr-mascotnum.fr/documents.html`

Note that on HAL `http://hal.archives-ouvertes.fr/` you can choose the GdR MASCOT-NUM affiliation. You can choose several affiliations.

Previous MASCOT-NUM events: 06, 13, 31, 38, 42, 69, 75, 84, 91

Upcoming MASCOT NUM events :

- May 11: Working meeting on *Stochastic Differential Equations and Uncertainties*, Paris, France;
- May 18-22: Ecole de printemps Pec'num : Plans d'expérience classiques et numériques. Lyon (Ecole Centrale), France;
- May 19: Working day *Algorithmes particulaires*, Onera, Toulouse.

Next MASCOT NUM conference :

- Toulouse, France, March, 23-25, 2016.

Some related events (see MASCOT NUM website for more events) :

- Reduced Order Models for Stochastic Inverse Problems (MS 10), organized in the framework of the 1st International Conference on Uncertainty Quantification in Computational Sciences and Engineering (UNCECOMP 2015), Crete, Greece, May 25-27, 2015;

- ENBIS 2015 (15th Annual Conference of the European Network for Business and Industrial Statistics), Sept 6-10, 2015, Prague, Czech Republic;

- ESREL conference, ETH Zurich, Sept 7-10, 2015. With special session on "Surrogate models for structural reliability analysis";

- UQ16, SIAM Conf. on Uncertainty Quantification (UQ16), April 5-8, 2016, EPFL Campus, Lausanne, Switzerland;

- Eighth International Conference on Sensitivity Analysis of Model Output (SAMO 2016), Santa Fe (New Mexico), 2016.

Have a nice meeting