

**Conference « Mathematics-Algorithms-Proofs : Formalization of
Mathematics »
Monastir (Tunisia), 14-18 december 2009**

Tutorials: 1 hour (Georges Gonthier, Julio Rubio)
Talks: 45 mn + questions

Monday 14 dec 09 : 08h45-0915 : Registration

Monday 14 dec 09 : Session 1 (chairman: Peter Schuster)

9h15-10h15: Georges Gonthier: Formalization of finite groups
Coffee break
10h45-11h45 : Mohamed Barakat : homalg- a framework for homological computations

Session 2 (chairman: Julio Rubio)

14h-15h : Marie-Francoise Roy : Real Algebraic Geometry
15h15-16h : Bas Spitters : Implementing constructive analysis in Coq
Coffee break
16h30-17h30 : Peter Schuster : Zorn Induction

Tuesday 15 dec 09 : Session 3 (chairman: Bas Spitters)

9h15-10h15 : Georges Gonthier: Formalization of finite groups
Coffee break
10h45-11h45 : Mohamed Barakat : A new approach for computing topological orbifold cohomology

Session 4 (chairman: Marie-Francoise Roy)

14h-15h : Julio Rubio : Formalization of Algebraic Topology
15h15-16h : Cesar Dominguez: Data structure and algorithms for simplicial topology in proof assistants
Coffee break
16h30-17h30 : Yann Kieffer: Exact, abstract, certifiable computations

Wednesday 16 dec 09 : Session 5 (chairman: Henri Lombardi)

9h15-10h15 : Georges Gonthier: Formalization of finite groups
Coffee break
10h45-11h45 : Julio Rubio : Formalization of Algebraic Topology

Thursday 17 dec 09 : Session 6 (chairman: Renaud Rioboo)

9h15-10h15 : Georges Gonthier: Formalization of finite groups
Coffee break
10h45-11h45 : Julio Rubio : Formalization of Algebraic Topology

Session 7 (chairman: Georges Gonthier)

14h-14h45 : Daniel Bembé : A Certificate for Budan's Theorem
15h-15h45 : Henri Lombardi/Thierry Coquand : Constructive homological algebra (following Northcott)
Coffee break
16h15-17h15 : Ines Abdeljaoued-Tej/ Alia ben Kahla/ Annick Valibouze : Galoisian separators for bilogical systems

Friday 18 dec 09 : Session 8 (chairman: Thierry Coquand)

9h15-10h15 : Georges Gonthier: Formalization of finite groups
Coffee break
10h45-11h45 : Julio Rubio : Formalization of Algebraic Topology

List of Participants

- 1) Peter Schuster
Univ Leeds ; email: pschust@mathematik.uni-muenchen.de
- 2) Daniel Bembé
Univ Munich ; email: bembe@math.lmu.de
- 3) Mohamed Barakat
Univ kaiserslautern ; email: barakat@math.uni-sb.de
- 4) Marie-Françoise Roy
Univ Rennes ; email: marie-francoise.roy@univ-rennes1.fr
- 5) Henri Lombardi
Univ Franche-Comté ; email: henri.lombardi@univ-fcomte.fr
- 6) Thierry Coquand
Univ Goteborg ; email: coquand@chalmers.se
- 7) Julio Rubio
Univ Logrono ; email: julio.rubio@unirioja.es
- 8) Lionel Ducos
Univ Poitiers ; email : Lionel.Ducos@math.univ-poitiers.fr
- 9) Afef Ellouze
Univ Sfax ; afef_ellouze@yahoo.fr
- 10) Majdi Ben Halima
Univ Sfax ; email : majdi.benhalima@fss.rnu.tn
- 11) Sami Barhoumi
Univ Gafsa ; email : barhoumi_sami@yahoo.fr
- 12) Faïçal Bouazizi
Univ Sfax ; email: faicelboua@yahoo.fr
- 13) Abdessalem Mnif
Univ Sfax ; email: slim_mnif@yahoo.fr
- 14) Ihsen Yengui
Univ Sfax ; emails : ihsen.yengui@fss.rnu.tn ;

ihsen_yengui@yahoo.fr

- 15) Ines Abdeljaoued Tej
Univ Tunis ; i.tej@gnet.tn
- 16) Morou Amidou
Univ Niamey ; moorou_a@yahoo.fr
- 17) Ilhem Djellit
Univ Annaba ; email : djellitil@yahoo.fr
- 18) George Gonthier
Microsoft ; email : gonthier@microsoft.com
- 19) César Dominguez
Univ Logrono ; email : cesar.dominguez@unirioja.es
- 20) Kacem Belghaba
Univ Oran ; email : belghaba.kacem@univ-oran.dz
- 21) Miloud Messirdi
Univ Tlemcen ; email : mmessirdi@yahoo.fr
- 22) Annick Valibouze
Univ Paris 6 ; email : annick.valibouze@upmc.fr
- 23) Bas Spitters
Univ Nijmegen ; email : spitters@cs.ru.nl
- 24) Yves Bertot
INRIA Sophia Antipolis ; email Yves.Bertot@sophia.inria.fr
- 25) Laurence Rideau
INRIA Sophia Antipolis ;
email:Laurence.Rideau@sophia.inria.fr
- 26) Mokhless Hammami
Univ Sfax ; email : mokless.hammami@fss.rnu.tn
- 27) Mohamed Ali Hammami
Univ Sfax ; email : mohamedali.hammami@fss.rnu.tn
- 28) Hamadi Jerbi
Univ Sfax ; email : hamadi.jerbi@fss.rnu.tn
- 29) Amina Hadj Kacem
Univ Sfax ; email : aminahadjkacem@yahoo.fr
- 30) Samiha Monceur
Univ Sfax ; email : monceur_samiha@yahoo.fr
- 31) Renaud Rioboo
ENSIIE, Paris ; email :Renaud.Rioboo@ensiie.fr
- 32) Yann Kieffer
Lab G-SCOP, Grenoble ; email : Yann.Kieffer@g-scop.grenoble-inp.fr
- 33) Alia Ben Kahla
ESSAI – IPT, Tunis ; email : Alia.Benkahla@pasteur.rns.tn
- 34) Ines Abdeljaoued
ESSAI – IPT, Tunis; email : i-tej@gnet.tn