# Laboratory of Mathematics and its Applications of PAU - UMR CNRS 5142

### Welcome



The Laboratory of Mathematics and its Applications of Pau is part of the CNRS and of the University of Pau and Adour Region. It is a member of the IPRA Federation FR 2952 and of the Institute Carnot-isifor.

Furthermore, the LMAP is associated with INRIA via 2 common teams, namely «Makutu» and «Cagire».

## Main research areas

#### **Probability and Statistics**

- · Stochastic modeling, probability,
- · Data analysis, statistical inference.

#### · Algebra and Geometry

· Algebraic geometry of projective space and low dimensional topology.

#### · Partial differential equations analysis

Non linear partial differential equations and optimization.

#### Analysis and Numerical Simulation

- Fluid mechanics, porous media, waves and turbulence,
- · Discretization methods for partial differential equations,
- · Approximation, moving mesh, High Performance

## **Areas of Expertise**

- Petroleum engineering and reservoir simulation
- Aerothermodynamics (combustion and cooling)
- Hydrodynamics and pollutant transportation
- · Reliability and safety in industry
- · Sampling design and quality control

- Data analysis and statistical methods for decision making
- · Environment and biology

# **Brochure of the LMAP**

Research (pdf - 5,42 Mo)







