## **Subjects of the thesis (University of Lille 1)**

- Numerical analysis and simulation of multi-fluid models (E. CREUSE C. CALGARO)
- Spatio-temporal analysis of surfaces evolving in time by a Riemannian geometry approach (J.C. ALVAREZ-PAIVA)
- Application of linear programming in cancer therapy (IMRT) (A. DERMOUNE)
- Design and analysis of nonlinear scheme for solving parabolic problems: application to the flow in porous media (C. CHAINAIS-HILLAIRET - C. CANCES)
- Explicit estimates of the summation function of the Moebius function (O. RAMARE)
- Study of compromise accuracy-time computing and Big Data Precision/Computation time trade-off with big data (C. BIERNACKI - A. CELISSE)
- Non-geometry archimediennne (R. CLUCKERS)
- Integration p-adic and motivic (R. CLUCKERS)
- The Lille scholars and their inclusion in the city (A. BARBEROUSSE R. TAZZIOLI)
- Percolation in germ models-grains arrested (D. DEREUDRE D. COUPIER)
- Long memory processes in finance (C. TUDOR)
- Gibbsian point processes with interaction driven by a marked hypergraph (D. DEREUDRE)
- Random projections and statistics (N. WICKER-A. MURUA)
- On the expansion of applications between surfaces (F. BALACHEFF)
- On a conjecture of Kaplansky (M. MBEKHTA)
- Integrable systems on certain moduli spaces with singularities (J. HUWBSCHMANN)
- Local theorems limited by the principles of invariance hölderiens (Y. DAVYDOV-C. SUQUET)
- Spectral theory of operators: quantitative aspects (C. BADEA)
- Topology of polynomial maps (M.M.TIBAR)
- Variations of solutions of stochastic differential equations (C. TUDOR)