



**LMBA**  
Laboratoire de Mathématiques  
de Bretagne Atlantique  
UMR6205 - CNRS/UBO/UBS

## STAFF

105 members, including  
▶ 60 researchers (20 UBS)  
▶ 25 doctoral students (13 UBS)

## CONTACT UBS

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## PARTNERS



## UMR 6205 BRETAGNE ATLANTIQUE MATHEMATICS LABORATORY LMBA

LMBA brings together the majority of mathematicians in West Brittany. The research areas cover a large part of mathematical domains, from theoretical aspects to the more applied ones, such as algebraic and differential geometry, mathematics physics, topology and groups; dynamic systems, probability and statistics; control, differential games, digital analysis, and image processing.

Three main topic areas are structured around teams and seminars:

- ▶ Geometry and topology;
- ▶ Dynamic systems, probability and statistics;
- ▶ Analysis, stochastic phenomena, and applications.

## SCIENTIFIC DOMAIN

Mathematics and their interactions.

## APPLICATION SECTORS

Banking / Insurance / Energy /  
Environment / Eco-activities / Industries /  
Information technology & software / Logistics /  
Transport / Healthcare / Telecommunications.

## EXPERTISE

Quantum invariants / Foliation /  
Probability / Random walk / Random media /  
Statistics / Statistical analysis /  
Statistical training / Image  
Processing / Mathematical modeling /  
Numerical analysis / Deterministic and  
stochastic control / MegaWave2 software/  
Data Science.

## SPECIFIC EQUIPMENT

Unit library, member of RNBM  
(National network of mathematics libraries  
GDS2755 of the CNRS):  
10,000 books, 50-odd periodicals.

## SCIENTIFIC COLLABORATION

**International:** Numerous research teams  
(Germany, Canada, UK, United States, China,  
Columbia, Peru, Brazil, Algeria, Vietnam, Japan,  
Russia, Spain, Norway).

**European projects:** Breuds (exchanges  
between Europe and Brazil) and Portonovo.

## PLATFORM

The Cyber Security Center uses  
the multidisciplinary expertise of research  
laboratories, including the LMBA.  
The mathematics part of research involves  
mathematics and statistics.

## KEYWORDS

Algebraic and differential geometry /  
Ergodic Theory / Probability/ Statistics/  
Applied Analysis / Image / Asymptotic analysis.