



INSMI

# INSMI (CNRS)

National institute for mathematical sciences and their interactions

*“Developing mathematics for tomorrow.”*

With the aim of excellence in research across all mathematical domains, the National institute for mathematical sciences and their interactions (Insmi) fosters and coordinates French mathematical research nationwide and contributes to its international reputation.

Insmi promotes interactions of mathematics with other disciplines, the business world, and society. It supports scientific activity through the allocation of researchers and support staff, as well as through a clear policy of hosting CNRS teaching-researchers on delegation.

The Institute advocates for open science and various publication models. It implements policies in favour of gender parity and inclusivity. It participates in coordinating and promoting research-based training and research in mathematics. Insmi also supports actions for disseminating knowledge and promoting mathematics, particularly targeting young people and the general public.

## Strategic Axes

To successfully fulfil its missions, Insmi:

- Fosters its **network of laboratories and structures** and supports them with human and financial resources;
- Ensures a steady flow of **recruitment of young researchers**, including some on interactive themes;
- Encourages **mobility of researchers**: thematic, geographical (national and international), and between establishments;
- Develops **cross-cutting research structures**;
- Intensifies **international relations** both by developing its international laboratories and by developing international conference and reception centres;
- Participates in setting up **multidisciplinary programmes** and **cross-appointments** of researchers.

## Key Figures



## International Outreach

**International exchanges** are vital for ensuring the excellence of French teams. They also manifest this excellence.

In addition to numerous spontaneous collaborations and exchange and collaboration agreements, Insmi manages **specific CNRS tools** that help structure exchanges between networks.

## Instruments

The French mathematical community has established national instruments that Insmi leads or co-leads, providing support for research in various forms:

■ **International meeting centres**: the Henri Poincaré Institute (IHP) in Paris, the International Centre for Mathematical Meetings (CIRM) in Marseille Luminy, and the Artificial Intelligence for Sciences, Sciences for Artificial Intelligence (AISSAI) centre, co-led with CNRS Computer Science;

■ **Tools for reinforcing interdisciplinarity**: the Institute of Mathematics for Planet Earth, the Programme and Priority Equipment for Research «Mathematics for Living, Environment, and Society,» aimed at developing research in mathematics around societal issues (climate, biodiversity, etc.);

■ **Documentary tools**: Mathdoc unit, Jacques Hadamard library in Orsay, and the National Network of Mathematics Libraries, structuring mathematical documentation at the national level and promoting open science;

■ **Digital skills networks**: the Gricad unit for high-performance computing and data storage, the Mathrice network, bringing together computer scientists from mathematics laboratories, and the Calcul research group for animating exchanges around scientific computing;

■ **Tools for strengthening relations with society**: the Agency for Mathematics in Interaction with Business and Society (AMIES) and the AuDiMath network for mathematics dissemination activities;

■ **Structuring tools**: research federations associating all French mathematical research units and thematic networks (GDR).

