

Presentation of GIPSA-Lab

November 15th, 2024



PROGRAMME

Room B153

8h30 - 8h55	Lab Presentation	Nicolas Marchand
8h55 - 9h05	GAIA Research Division	Isabelle Sivignon
9h05 - 9h15	PAD Research Division	Federica Garin
9h15 - 9h25	PPC Research Division	Laurent Girin
9h25 - 9h35	PSD Research Division	Bertrand Rivet
9h35 - 9h45	Health & Safety	Christophe Savariaux

Room Jean-Marc Chassery

10h00	Break
10h00 - 11h45	Forum of services & commissions
11h45 - 12h00	Quiz game

12h00 - 13h30 Buffet (room B153)

13h30 - 15h30 Lab guided tour (including library and platforms)

16h00 - 19h00 Gipsa-doc event (lab PhD association)



Skills

gipsa-lab conducts theoretical and applied research on

**CONTROL, SIGNAL, IMAGES, SPEECH,
COGNITION, ROBOTICS, LEARNING**

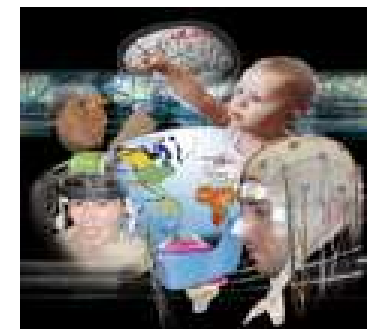
Multidisciplinary laboratory at the interface between the **physical** and **digital worlds** based on **experimentation**



3 institutional partners



Associated partner





UMR

= **Unité Mixte de Recherche**

= **Mixed research unit**

Created in 2007 :

CNRS - Grenoble-INP – UGA

1 INRIA team

1 OSUG team



From theory to experimentation

Importance of experimental platforms

GIPSA-lab in brief



Research themes

CONTROL, SIGNAL, IMAGES,
SPEECH, COGNITION, ROBOTICS,
LEARNING



~350 personnes : 140 full time researchers and teachers (50% research) and adm. Tech. staff, 200 non-permanent staff including 60% of PhD students
1/3 GINP, 1/3 CNRS, 1/3 UGA



Interdisciplinarity

4 CNRS disciplines + INRIA

7 University disciplines (CNU)

15% Humanities and Social Sciences



4 research divisions

15 teams/research themes

2 support divisions

Administrative and financial division

Technical division



GIPSA-lab in brief



15 M€ including salary
4,5 M€ on
projects/contracts
including 1 M€ of direct
industrial contract



4 ERC Advanced Grant
4 Institut Universitaire de
France
30 scientific awards
5 thesis awards



400 publications/y
50% of journal paper



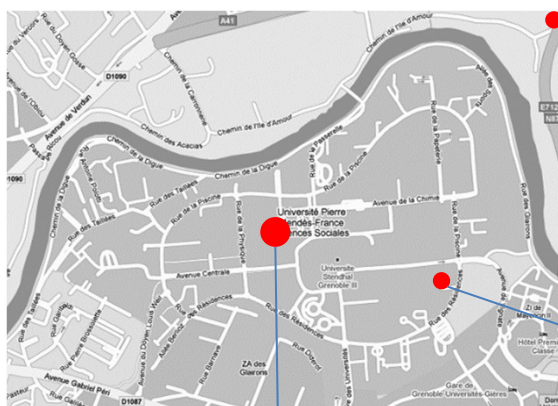
1 spin-off/year
2 incubating firm
10 patents/year

- **More than 20** PhD prizes
- **More than 30 papers** awarded as
« BEST PAPER »
- **4 European Research Council Grants**
(ERC)
- **11 awarded reserachers**
- **2 awards** by the French Académie
des Sciences
- **4 researchers** at Institut universitaire
de France
- **1 chair of Excellence IDEX-GSTAT**
- **8 MIAI chair of Excellence**
- **1 regional finalist** at *Ma thèse en 180*
secondes (2017)



GIPSA-lab's location

Grenoble Campus



Site INRIA-Montbonnot

DANCE Team
~5%.



Site Stendhal

SYLDO Team
~5%.



~90%

Site Ampère Grenoble INP



Skills of the lab

CONTROL, SIGNAL, IMAGES, SPEECH, COGNITION, ROBOTICS, LEARNING

Scientific themes



FROM OBSERVATION TO INTERPRETATION:

images and signal processing, information and communication, perception, visual perception, remote sensing, geophysics.



FROM MODELING TO DECISION MAKING:

modeling, analysis, observation, control, fault diagnosis of complex, embedded systems and networked systems.



FROM SPEECH TO HUMAN COMMUNICATION

conversational agents, face to face communication, biomechanics, speech and languages, linguistics, dialectology, neurocognition

Usage

Energy, Geophysics,
Environment, Health

Robotics, Embedded systems,
Mechatronics, Micro and
nano systems

Telecommunications,
Networks, Sensors

Human-Machine interaction

Transport, Security,
Surveillance

Biomechanics, Brain, Disability,
Rehabilitation, Teaching

.....



Experimental facilities

1000 m² of experimental facilities
dedicated to measurements and observation

Access to others equipments



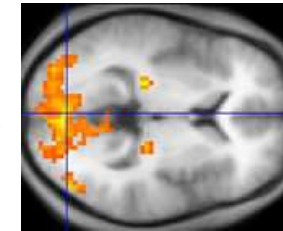
MOV (biomechanics)



CONTROL



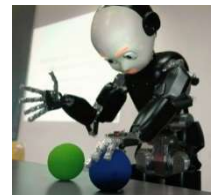
Linguistics Corpus



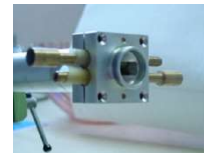
MRI/fMRI



PERSEE (Vision-EEG)



ROBOTEX



AERO (acoustic and physic)

Teaching facility



AIDA



MICAL (human-machine Interaction)



*Language facility
Stendhal*

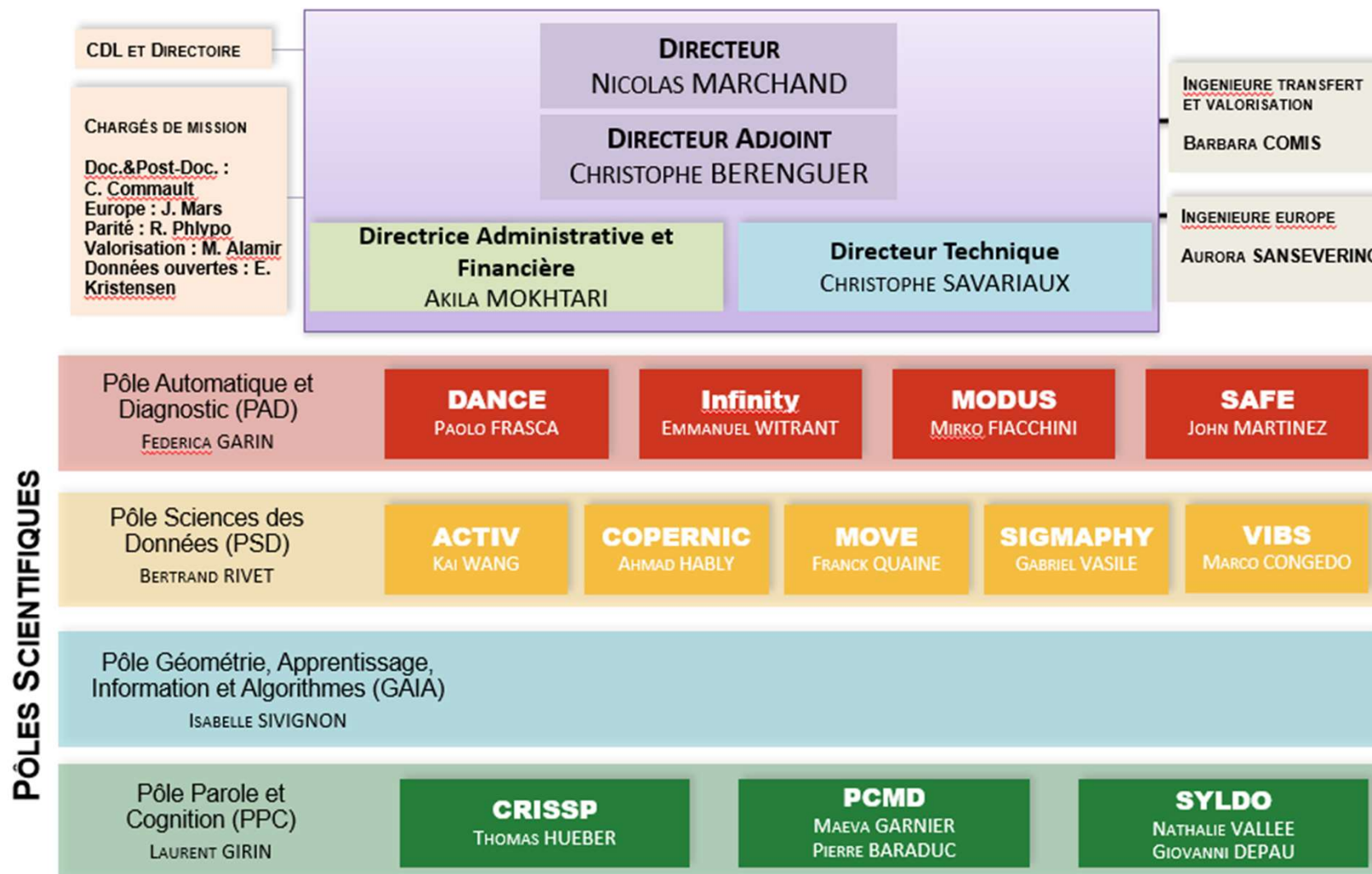
Outdoor facility



Corner reflector for satellite images



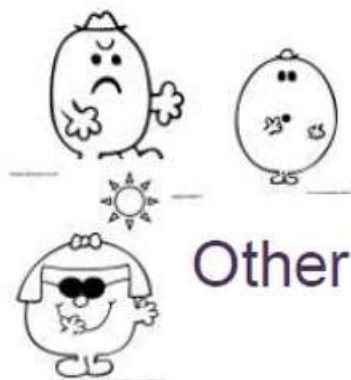
Structure of the lab





Being at GIPSA-lab

C. Commault: Relationship with the PhD and postdocs students



Other scientists



PhD Student

Other PhD Students

GIPSA-Doc



SERVICES

