



# L'Institut Pascal (IPa)

« Si la recherche ne se planifie pas, elle se nourrit par contre de multiples rencontres.. »

[J.P. Aubin, 20<sup>e</sup> anniversaire de l'IHP]

# The Institut Pascal purpose

- The main **mission** of the Institut Pascal is to provide a platform making it possible to organize **thematic programs** gathering a scientific community for a significant duration, to promote the emergence of new scientific topics and original scientific initiatives.
- The **specificity** of IPa, is to cover a very **wide thematic range**, which includes all of “hard sciences” (and even a little bit of soft sciences).

# The IPa context and timeline

**Contexte : The Paris-Saclay University** (dob : January 2019)

→ 3 universities + 4 higher education institutions + 7 research institutions

- 65 000 students
- 9 000 Master
- 5 500 Ph.D.

- 350 laboratories
- 10 000 researchers and professors



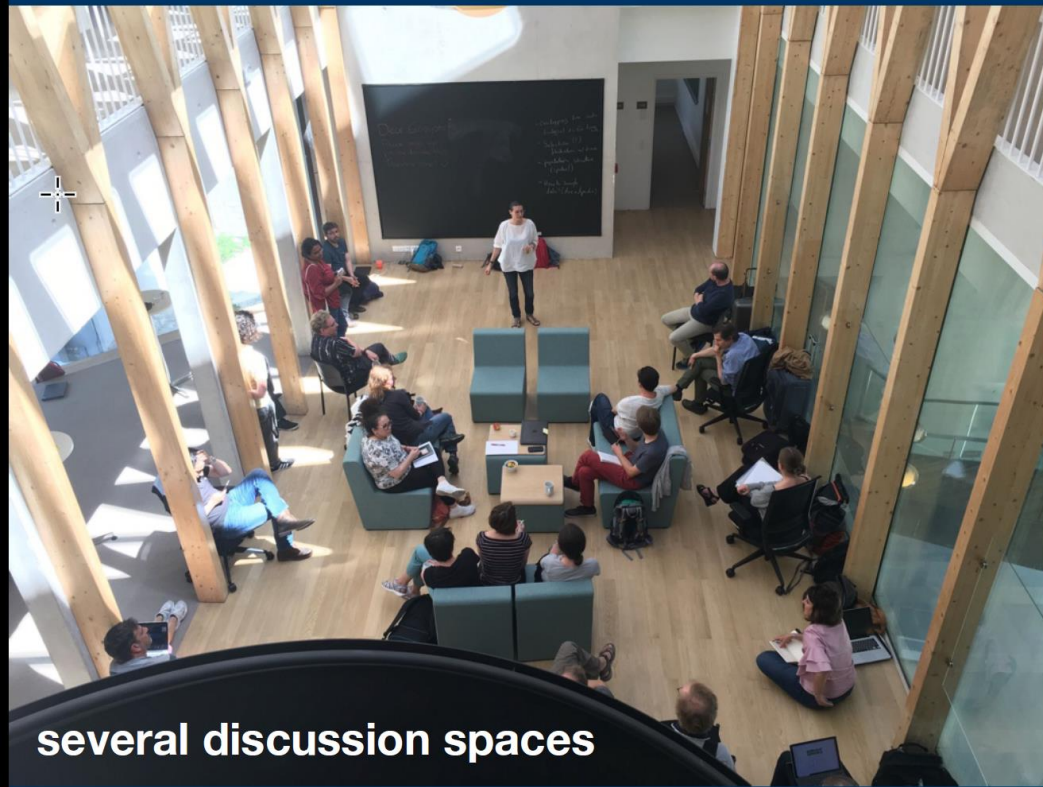
# The IPa context and timeline

## Timeline :

- A **long time process** (started ten years ago in 2010-2011)
- But a **young institution**:
  - The official birthdate of the IPa is **January 1st 2018** [creation by the Paris-Saclay university, together with 7 other supervising institutions (CNRS, CEA, INRIA, IHES, CentraleSupélec, ENS-PS, IOGS)].
  - The first series of thematic programs within the “Pascal” building took place between May 2019 and March 2020.



# Le bâtiment Pascal (IPa/LPTMS/FAST)



# The Institut Pascal « structure »

## The Board



**Jacques Bittoun**  
Deputy Director  
(Life Science)



**Denis Ullmo**  
Director  
(physics)



**Aurélie Lando**  
Administrative Director



**Yves Balkanski**  
Deputy Directeur  
(earth and climat science)

# The administrative team



**Sabrina Soccard**



**Anna Guerreschi**



**Bamissa Sangaré**



**Francesca Sconfienza**  
(maternity leave)



# The Scientific Council

**Alain Aspect** (*Physique atomique*)

**Jean Braun** (*Sciences de la terre*)

**Irène Buvat** (*Interface médecine/physique*)

**Catherine Cesarsky** (*Astrophysique*)

**Dominique Costagliola** (*Epidemiology*)

**Anne-Laure Dalibard** (*Mathematics*)

**Odile Eisenstein** (*Chimie théorique*)

**Albert Fert** (*Phys. de la matière condensée*)

**Patrick Flandrin** (*Traitement du signal*)

**Catherine Jessus** (*Life Sciences*)

**Jean-François Joanny** (*Interface biologie*)

**Sylvie Joussaume** (*Climat Sciences*)

**Philippe Lambin** (*Nano sciences*)

**Marek Lewitowicz** (*Nuclear Physics*)

**Sylviane Muller** (*Health Sciences*)

**Stéphane Nonnenmacher** (*Mathématiques*)

**Christine Paulin** (*Informatique*)

**Michel Spiro** (*Hautes énergies*)

**Pierre Guibentif** (*MSH Paris-Saclay*)

**Xavier Reboud** (*Agro-ecology*)

**Agnès Roby-Brami** (*Neurosciences*)

**Michèle Sebag** (*Computer Sciences*)



# The IPa « structure »

## The Local Council (CLIP)

GS	Représentants CLIP
BioSpheRA	Gwendal Restoux Olivier Martin
Chimie	D Lauvergnat P Lesot
Computer Science	Dominique Barth Nazim Agoulmine
GEOSCIENCE	Hélène Brogniez Elisabeth Gibert-Brunet
Institut des Sciences de la Lumière	Fabienne Goldfarb Philippe Grangier
Institut des Energies Renouvelable	Emmanuelle Deleporte Patrick Schembri:
Life Science and Health	Yves Gaudin Gérald Peyroche
Mathématiques	[ Ana-Maria Castravet / Pierre Vanhove ] [Ludovic Goudenège / Christophe Giraud ]

GS	Représentants CLIP
Physique PhOM	Olivier Dulieu Grégoire Misguish
Physique SPU	Marc-Antoine Miville- Deschenes Mathieu Vincendon
Physique P2I	Frédéric Déliot, Tiina Suomijarvi
Santé et médicament	Françoise Bachelerie Christophe Junot
Santé publique	Florent de Vathaire Oriane Dumas
Sciences de l'Ingénierie et des Systèmes	Silviu Niculescu
Sport, Mouvement et Facteur Humain	Claire Thomas Junius

CAC	P. Lesot
-----	----------

Bâtiment Pascal	Emmanuel Trizac Pierre-Philippe Cortet
-----------------	---

## 8 thematic programs

- INDICE : earth and climate science
- Ecosystem Dynamics : mathematics / genetics
- Learning to discover : data science / high energy
- Urban mobility : data science / engineering science / sociology / geography
- SoStar : astrophysics
- APPTh : astrophysics / high energy
- UPHC : high energy
- DYMCOM : molecular physics

# IPa-2019 summary

## 8 thematic programs

- INDICE : earth and climate science
- Ecosystem Dynamics : mathematics / genetics
- Learning to discover : data science / high energy
- Urban mobility : data science / engineering science / sociology / geography
- SoStar : astrophysics
- APPTh : astrophysics / high energy
- UPHC : high energy
- DYMCOM : molecular physics

# IPa-2020 summary

**Covid-19**

# Equipment for hybrid (remote/face-to-face) mode

## Purpose :

- In the short term : adapt to the Covid-19 pandemic situation
- In the medium and long term : « decarbonation » of research

## Equipment (installed one year ago)

- **Two connected amphitheater**
- **Three connected rooms:** These rooms (I107, I203, I217) are both physical rooms (for onsite participants) and virtual rooms (for remote participant). They are intended specifically for small group discussions in hybrid mode.
- **One connected informal space**
- **Four DtenMe** “collaboration device”

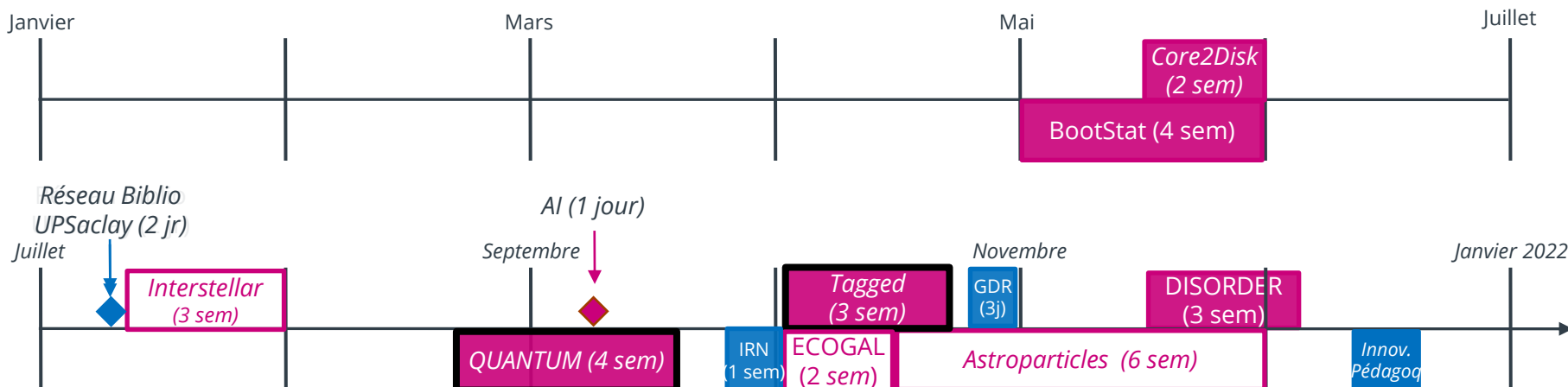
**NB 1 : The Connected Rooms and DtenMe are more than nice video screens with a good sound and video system.**

Both are **electronic white boards** which can be written on both locally or remotely. They are not intended just as nice “zoom discussion set”, but to make possible **hybrid discussion around a white board**.

**NB 2 : If you connect your personal computer within one of the connected room or amphitheater, please do not connect to audio.**



# IPa programmes 2021



Prog. financé IPa  
Hybride

Prog. autofinancé  
Hybride

Durée écourtée

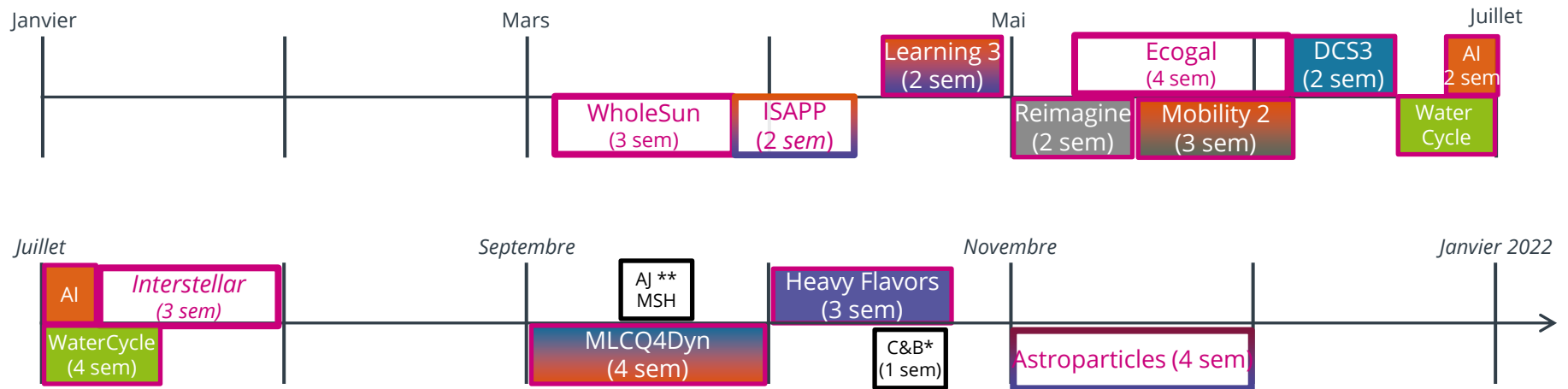
Formule modifiée

Short Event

# Thematic Programs 2022

➤ Executive summary : 14 programs / 39 weeks

## ➤ Agenda



Prog. autofinancé

Prog. financé IPa



data sciences



climat sciences



low energy physics



high energy physics



astrophysics



educational sciences

\*Ecole Changement climatique et Biodiversité

\*\* Action Jointe MSH

# Practicalities I : Covid or not Covid ?

Mandatory constraints due to Covid has been significantly relaxed in the last few weeks.

However this might have more to do with the approaching elections than with a disappearance of the virus

- More than 100 000 new case every day in France
- We had our very own (and first) covid cluster during the last program

## Thus, even if this is not mandatory we suggest:

- **To wear masks** whenever this is feasible, and in particular in amphitheatres
- **During groups discussions :**
  - **Keep windows open** as much as possible.
  - Use the **CO2 measuring devices** in the discussion rooms
  - We have **very nice terrasses**. Weather permitting, take advantage of them.

# Practicalities II : The program managers and you



Sabrina Soccard

- Sabrina is here to help



# Practicalities II : The program managers and you



Sabrina Soccard

- Sabrina is here to help
- But there is only one of her, and a lot of you

# Practicalities II : The program managers and you



Sabrina Soccard

- Sabrina is here to help
- But there is only one of her, and a lot of you

- **Read the participant handbook** (either now or just before you feel the urge to drop in their office to ask a practical question).
- **Bring back your cup** (/plate/glass/etc..) **to the kitchen** (or even better in the dishwasher)
- **Small print jobs** (plane tickets, etc..) **are fine**, but try to repress the urge to print the Ph.D. thesis of your student.
- **Follow what is going on on slack ...**

# Practicalities III : after the program

## Feedback (for us and our supervising institutions) :

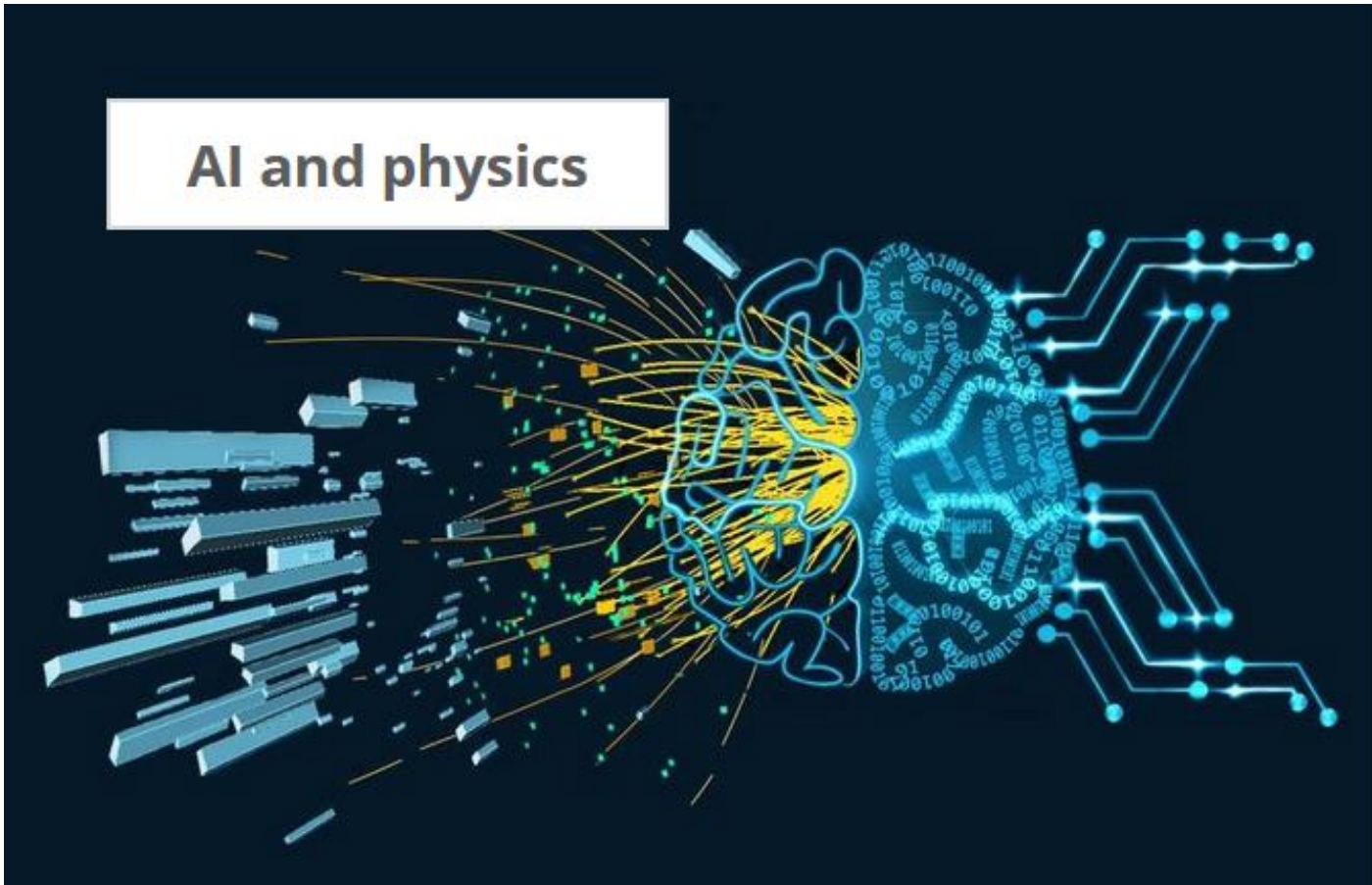
- **Just after the program** → qualitative questionnaire (mainly for us)
- **A year after the program** → a more quantitative questionnaire about the outcomes of the program (mainly for our supervising institutions)

→ **In the mean time do not forget to insert the sentence** “[..] *This work was made possible by Institut Pascal at Université Paris-Saclay with the support of the program “Investissements d’avenir” ANR-11-IDEX-0003-01* “ **in the acknowledgment section of papers associated with the thematic program**

## « Cahier de l’Institut Pascal »

Possible publication associated with the thematic program.

## AI and physics



**Welcome to the Institut Pascal !**

**Enjoy your program !**