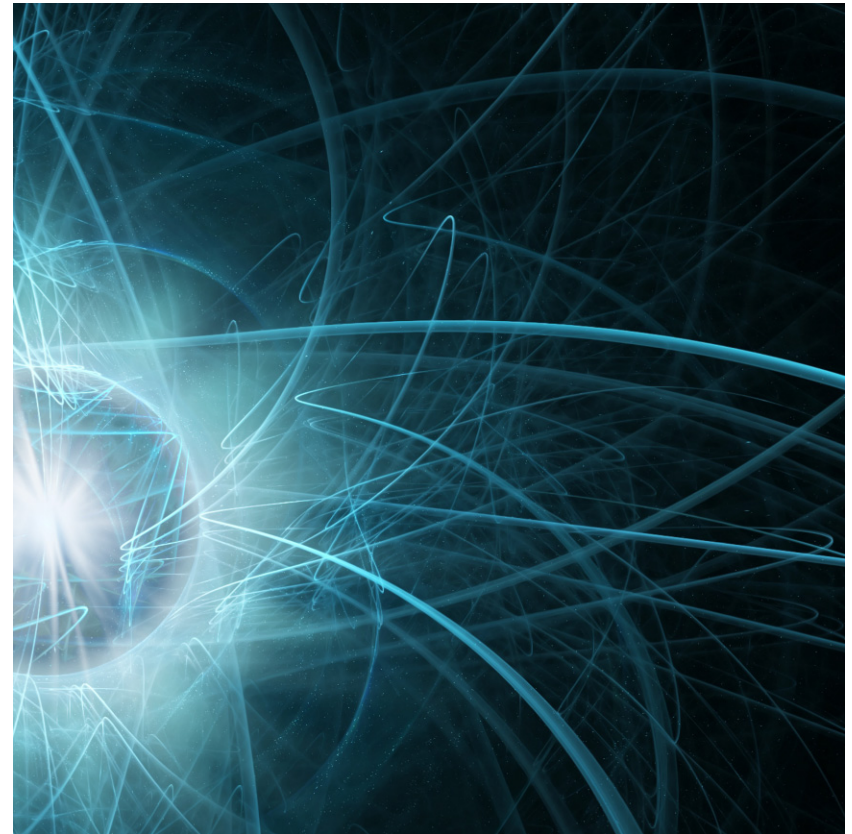


Kick Off Meeting

**Paris-Saclay Center for Data
Science**

June 30, 2014



Campus Paris Saclay

FONDATION DE COOPERATION SCIENTIFIQUE

THE PARIS-SACLAY INITIATIVE :

A SHARED AMBITION

1. fight fragmentation of research and higher education
2. bridge the innovation deficit
3. build an *international showcase associating Campus life with research, education, and socio-economic impact at highest international level*

➔ **Paris-Saclay University**

Paris-Saclay Initiative : partner institutions



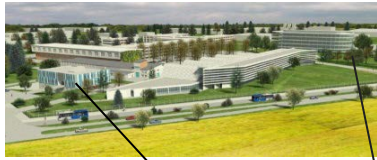
A strong center for research and higher education developing since the early 50^{es}, with many major French players ...

... attracting new top players after 2010 French Government decision

By 2018, 22 prestigious partner institutions will be based in Paris-Saclay perimeter :

- **2 universities** (including top French university in Shanghai ranking : Paris-Sud)
- **1 Ecole Normale Supérieure** (training higher education professors and researchers)
- **10 Grandes Ecoles** (engineering and business, among the top ranked in France)
- **6 National Research organizations** and Research Institutes
- a world level **competitiveness cluster** : Systematic (on IST)
- a **large scale synchrotron facility** : SOLEIL
- a **joint institution as leader** : the scientific cooperation foundation : FCS Campus Paris-Saclay

Academic Buildings and infrastructures in the Saclay area



Doseo
2014



ENS Cachan
Start of construction 2015



EDF Campus and R&D
2015



Mines-Telecom ParisTech
2018



Digiteo2
2015



Cilex
2015



I2BC
2017



On-going projects

Existing buildings

Grand Paris subway

RER B

Bus



Ecole Centrale Paris
2017



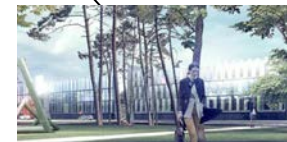
Institut des Sciences Moléculaires
2015
CPMR
2017-2018



C2N
2017



ENSAE ParisTech
2016

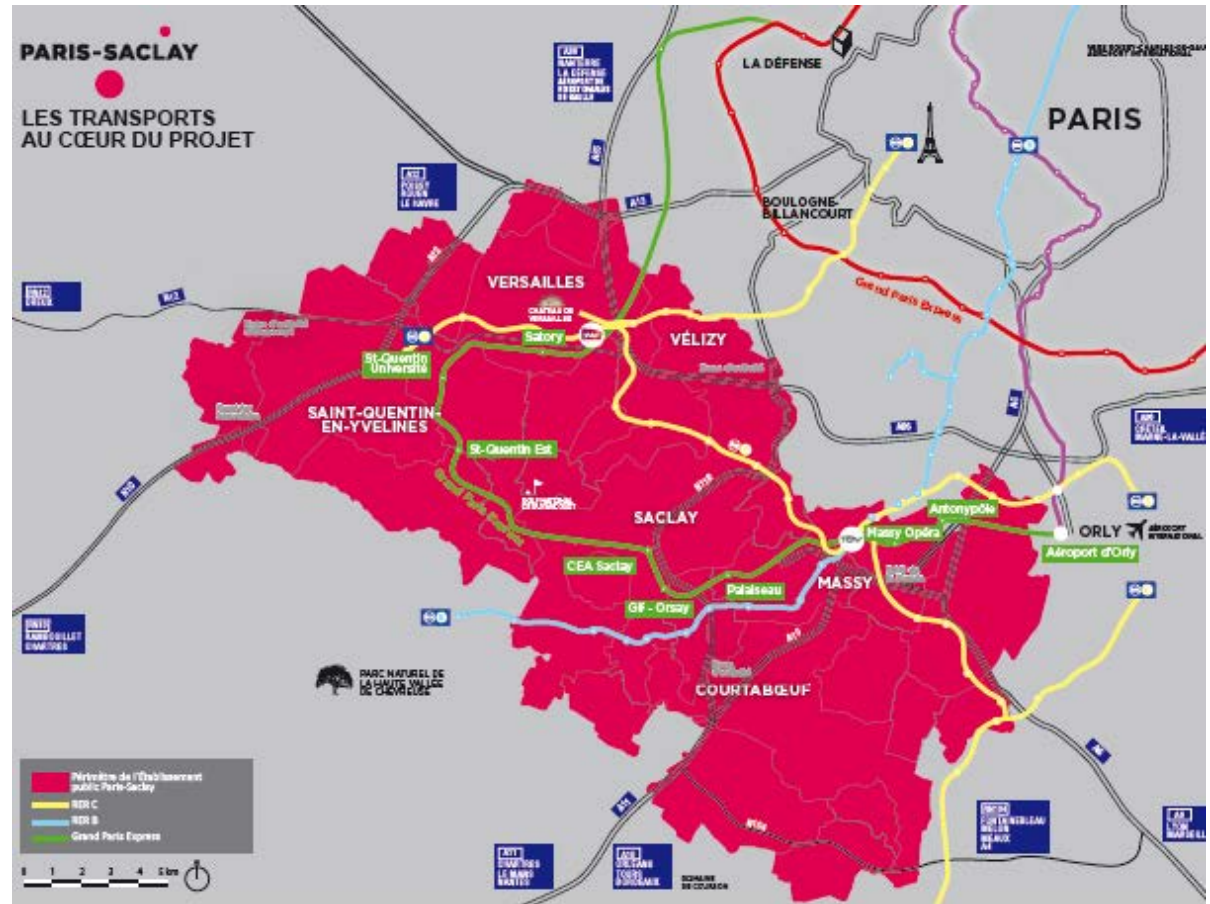


Laboratoires Polytechnique
2015

Paris-Saclay Cluster key success factor : fast transport to Paris and Orly airport

- ✓ **by 2015** : high flow buses from Versailles to Massy/RER-TGV
- ✓ **by 2023** : light automatic train connection from Saclay to Massy RER/TGV
< 10mn Saclay to Massy
< 30mn cross campus
- ✓ **by 2030** : light automatic train from Versailles to Orly and then Roissy
< 10 mn Versailles to Saclay
30 mn Saclay to Paris

several B€ of State funding



What Paris-Saclay is doing to encourage interdisciplinarity

In training:

- broader masters, interdisciplinary masters, fellowships for foreign students
- 30 Ph.D. fellowships per year for interdisciplinary work
- Interdisciplinary doctoral school
- *Upcoming*: interdisciplinary summer schools

In research:

- seed funding for interdisciplinary collaborations
- networking of projects across at least 2 disciplines
- inter-department coordination of emerging themes

The twelve IDEX projects (2013-2014)

Digital Society
Institute

Physics and
Engineering in
Medicine

NeuroSaclay
Institute

PS Inst. for
control and
decision

Interactions
Science Innov.
Society

Integrative
Genome
Biology

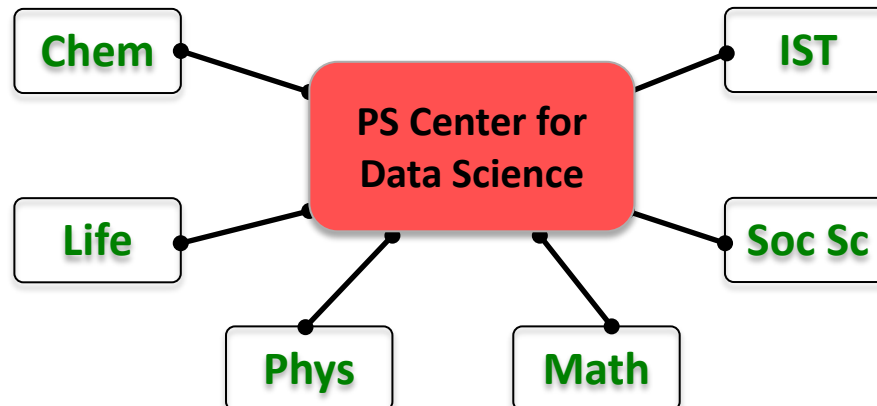
Plant
Phenotyping
Pipeline

Optical pulses
for ultrafast
science

Food-Health
Project

Nano Design
Platform

Modeling of
Living Systems



At least two different motivations behind CDS:

- Response to the data deluge and data challenge, in all different disciplines (this conference, Paris-Saclay project as a whole)
 - Biology, bioinformatics
 - Health sciences
 - Modelling
 - Post-processing and visualization tools
 - Planetary science
 - Cosmology
 - Search
 - Marketing, engineering sciences
 - Music information retrieval
 - particle physics,...

- Need to bring a Paris-Saclay global and coherent approach (efficiency, attractivity)

« Big Data » and « Data science » :

an exemple of a major asset that needs a global and coherent approach :

- ✓ In the Paris-Saclay perimeter:
 - 2 Equipex : CASD, Digiscope
 - 2 Labex : ECODEC, DigiCosme
 - 2 Lidex : Data Science et ISN
 - 1 IRT : SystemX
 - Many initiatives by Paris-Saclay members (chairs)
 - A center to promote the efficient use of HPC : Maison de la simulation
 - Two unique national supercomputing centers : Idriis, CEA
- ✓ A new and ambitious master offer

Key issues :

- Which common approach, which strategy and goals (research, teaching technological transfer)
- Global coherence and optimisation of the local plan
- Which future plan
- Which infrastructures and which evolution (DataCenter, HPC, Visualization etc.)



Thank you for your attention

Hope you'll enjoy the meeting

Good luck and long life to CDS