



French-American Doctoral Exchange Seminar (FADEX) 2016 : Cyber-Physical Systems

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View online : <https://www.france-science.org/French-American-Doctoral-Exchange,8401.html>

FADEX program encourages scientific exchanges between American and French Ph.D. students working in the same scientific field, and, by doing so, supports the creation of future French-American scientific collaborations.

This year, the program will focus on **cyber-physical systems**, which are made of co-engineered interacting physical and computational hardware and software components. A broad spectrum of application domains are covered, such as transportation, manufacturing, smart grids, buildings and cities, and healthcare.

Topics of interest:

- Embedded systems
- Robotics
- Internet-of-things,
- Smart devices, infrastructures of augmented reality
- Reactive systems and synchronous programming
- Automotive systems
- Cybersecurity
- Human-Machine Interaction
- Ambient Intelligence

Within the framework of the FADEX program, the Office for Science and Technology will invite a group of American Ph.D. candidates to France for a week.

Two seminars will be held in Grenoble and in Rennes

The seminars will allow the US and French Ph.D. students to share their work on **cyber-physical systems**. Workshops will also be conducted in order to study scientific and technological convergences between the candidates.

A plenary session in Paris

During the week, students will have the opportunity to attend a conference in Paris featuring keynote speakers. Guest researchers will be invited to present their most recent research developments in the cyber-physical systems field.

Program :

July, 4, Grenoble (IMAG) : Keynotes of **Joseph Sifakis “A Research Agenda for CPS”** and **Rahul Mangaram “Three Challenge Problems with CPS”**. Panel discussion. Ph.D. Students' presentations.

July, 5, Grenoble (Inria) : Visit of Inria, platforms GTL/Grenoble Traffic Labs, Amiquel4Home. Ph.D. Students'

workshop.

July, 6, Paris (UPMC) : Keynotes of **Robert Plana “Cyberphysical Systems: enablers for Industry 4.0”** and **James Crowley “Qualities for Smart Objects”**. Labex presentations. Ph.D. Students’ presentations. Visit of labs and the ISIR platform. Discussions on **international mobility opportunities**, with representatives from CNRS, Inria, ANR, Smart, Persyval-Lab, CominLabs.

July, 7, Rennes (Irisa) : Ph.D. Students’ presentations.

July, 8, Rennes (Irisa) : Keynote of **Benoît Caillaud “Its About Time...Time Domains in Hybrid Systems Modeling”**. Poster session. Ph.D. Students’ workshop. Visit of Immersia.

To download the detailed program, please click on the following link :



Applications for students enrolled in an American university :

Applications can be submitted until February 26, 2016. Ten students enrolled in an American university will be chosen to participate in the program and a grant will be offered by the Office for Science and Technology and its partners to **cover a round trip ticket to Paris, travel within France, accommodations and most meals**. French citizens enrolled in an American university are not eligible. The jury will base its decision on the scientific excellence of the candidate, their motivation and the maturity of their project.

To apply:

1. Fill in the online **Application Form** for FADEx 2016
2. Send a **Cover letter** and the completed **Advisor Authorization Form** by email to [Marie Letoret](#)

Note that a good cover letter should present your background and should help us assess your motivation to join our program.

Once selected, laureates will have to provide additional information such as, but not limited to:

1. Completed travel form;
2. Copy of passport;
3. Copy of US visa (if applicable);
4. High-resolution photo;
5. Abstract of presentation.

Applications for students enrolled in a French university :

Applications can be submitted until February 26, 2016. Ten students enrolled in a French university will be chosen to participate in the program and a grant will be offered by the Office for Science and Technology and its partners to **cover accommodations and most meals**.

To apply:

1. Fill in the online **Application Form** for FADEx 2016
2. Send a **Cover letter** and the completed **Advisor Authorization Form** by email to [Marie Letoret](#)

Note that a good cover letter should present your background and should help us assess your motivation to join our program.

Dates :

- **Application deadline : February 26, 2016**

- Results : April 1, 2016
- Deadline to provide additional documents (travel form, copy of passport, etc.): May 25, 2016
- Grenoble Seminar: July 4-5, 2016
- Paris Plenary Session: July 6, 2016
- Rennes Seminar: July 7-8, 2016

Partners :



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