

# FORGE NEWS

Forge Project Newsletter

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## Opening the FORGE platform -

### Open Call news and updates

**So far...** It's been eight months since the FORGE Open Call was announced and three rounds for submission of proposals have already concluded. Four projects are currently under implementation, demonstrating different applications of deployment of educational material over FIRE facilities. Some of the FORGE courses delivered from these projects have already been deployed and the initial feedback collected by both professors and students is very encouraging! More details will be announced soon, after receiving the evaluation results at the end of the open call projects.

**New offering!** Financial support will be offered to participants for the development of necessary software extensions to existing e-learning platforms in order to comply with the FORGE tools and processes, providing up to **€30,000 in total**. The extensions can be either eBook interactive widgets or wrappers to connect specific LMSs to the FORGE platform. It should be noted that this offering does not involve course development. The software extensions will be used in order to fill in gaps in the development of eLearning tools for supporting external communities of users.

**Submit your proposals!** Whether you are an educator, learner, developer or provider, many different types of proposals may be submitted for the FORGE Open Call, including: deployment (as-is) of an existing FORGE course in the context of a real-time course within the proposing institution(s); further development and extension of a FORGE course; design and development of a new lab course, following the FORGE methodology; transformation of a traditional course to an experiment-driven course; creation of interactive educational material and development of an eBook, based on the FORGE approach; development of new widgets and/or FIRE Adapters; offering a testbed for remote experimentation, etc.

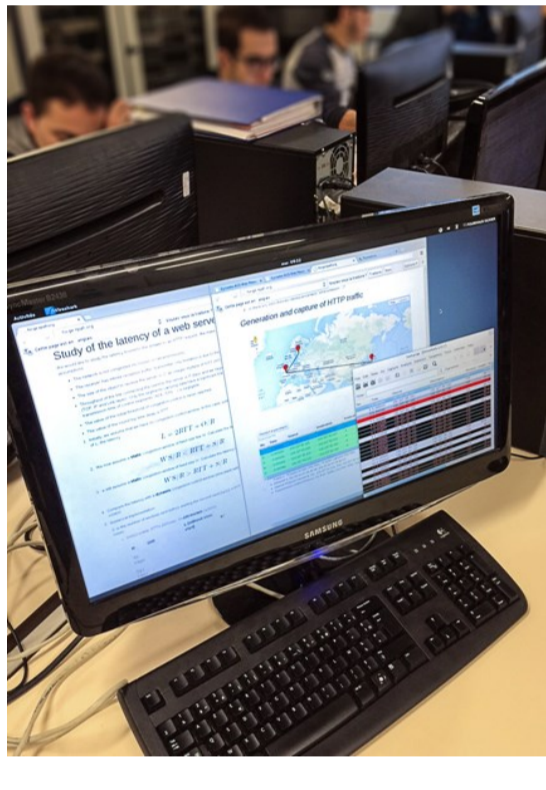
If you didn't make it for the third round of proposals that closed on November 20th, there is no need to worry! The FORGE Open Call remains active and proposals may be submitted at any time, even after a cut-off date of a specific submission phase. Find out more at the Open Call page of the project's website: <http://ict-forge.eu/opencall/>.

For further information and submission of inquiries don't hesitate to contact us at:

[opencall@ict-forge.eu](mailto:opencall@ict-forge.eu)



## TCP Congestion Control Course by UPMC



In November 2015, UPMC (Université Pierre et Marie Curie, one of the founding member of Sorbonne Universités consortium) deployed for the second time its FORGE lab course.

The UPMC FORGE lab course is included in a large teaching unit called ARES (Architecture des Réseaux) / COMNET (Computer Network) depending of the teaching language (French and English). The audience are 180 new computer science Master students. They are supposed to already have followed one Networking Introduction Course during their previous studies (Bachelor's degree). Different kinds of students are involved in the ARES/COMNET ranging from part-time in the industry French speaking students to EIT Digital English speaking students. This course focuses on a fundamental mechanism of TCP: the congestion control. After

few exercises illustrating the congestion control mechanisms, real traces of long distance traffic are performed on the PlanetLab facility and are analyzed with a packet analyzer tool. To perform the UPMC lab course, the week before, we perform a teaching team training to explain the process of the lab at UPMC and demonstrate the reservation tool by our technical support. The maximum number of pair of student at the same time guided resource reservation was 30. All pairs perform the course during the same time. Therefore, we made reservation of 1 PlanetLab/OneLab slice with 66 nodes: 33 Clients (30 + 3 spare nodes) and 33 servers. The client is the only resource where the pair must be alone to generate a correct capture. The 33 servers can be shared and are supposed to serve 3 clients each.

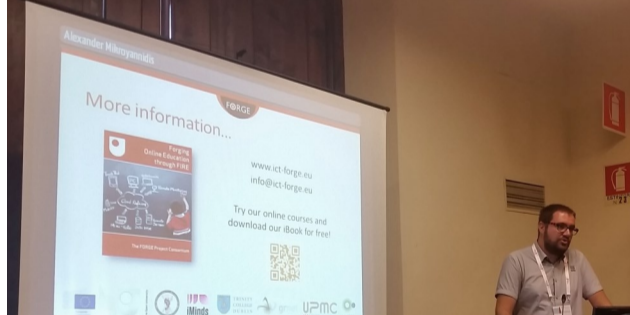


## News, News

We promote and disseminate not only FORGE's goals and achievements, but also, and in particular, trying to make the educational and research community aware of FORGE and its features and benefits

### FORGE joins forces with GoLab project

The FORGE and Go-Lab projects have jointly organised the hands on workshop "Building Remote Labs for Online Scientific Experimentation", which was collocated with the World Engineering Education Forum (WEEF), the International Conference on Interactive Collaborative Learning (ICL) and the International Conference on Engineering Pedagogy (IGIP). The workshop took place on 20 September in Florence, Italy.



Representatives from the FORGE and Go-Lab projects presented the methodologies and tools that have been developed by these two projects for building remote labs.

This has been the first event of the recently established Special Interest Group (SIG): Remote Labs and Online Experimentation. The SIG has been established within the European Association of Technology Enhanced Learning (EATEL) in order to drive and promote remote labs and online experimentation and to offer the technologies that can help stakeholders build experimental infrastructures and use them across different domains.

### FORGE presence spreads to Mexico



Dr. Marquez-Barja from Trinity College Dublin, was a guest speaker at 34th Anniversary of the Instituto de Tecnología de Mexicali. On the 19th of October, he presented FORGE through a keynote presentation to a broad audience, including students and academics of IT Mexicali, as well he conducted two courses using FORGE technology. These courses connected students in Mexicali to facilities at Dublin in Trinity College Dublin and Ghent in iMinds covering topics in wireless communication.

Profs. Arnoldo Diaz and Claudia Martinez, invited Dr. Marquez-Barja to present advancements in learning technologies and remote experimentation for possible application in their institution. As a result, Profs. Diaz and Martinez are targeting the on-going FORGE open call described in details in the FORGE website .

## UPCOMING EVENTS

### REV International Conference on Remote Engineering and Virtual Instrumentation

IEEE REV 2016 is the thirteenth in a series of annual events concerning the area of remote engineering and virtual instrumentation. The general objective of this conference is to contribute and discuss fundamentals, applications and experiences in the field of remote engineering and virtual instrumentation.

Dr. Johann M. Marquez-Barja will deliver a keynote at the REV conference, entitled "Remote Experimentation from Research to Education: A European Roadmap". This talk will present an overview of cutting-edge FIRE facilities, the FORGEBox framework and its components. Furthermore, it will cover the methodology for using such free resources and to create new courses using FORGE remote labs. Finally a roadmap for adapting experimentation from research to education will be discussed.