

LC NEWSLINE

THE NEWSLETTER OF THE LINEAR COLLIDER COMMUNITY

CURRENT ISSUE
11 DECEMBER 2014

Japanese industry getting
ready for the ILC

DIRECTOR'S CORNER

Timely Technical Review

[+](#) Share | [f](#) [t](#) [e](#) [r](#)

Barry Barish | 12 January 2012



*The GOLEM Tokamak at the Czech Technical University.
Image: FNSPE*

While in Prague, I also was invited to give a special general lecture at the Czech Technical University and while there was given a tour of the **GOLEM Tokamak**. This tokamak – a device that confines plasma in a toroidal shape – has an exceptional history. It was constructed in 1960 in Moscow under the name TM-1 as one of the first tokamaks built and is now the oldest tokamak in operation in the world. It serves as part of the fusion science programme as a learning device in a field that is now building the very large international project ITER, a step towards eventually creating fusion energy. An interesting feature of the GOLEM setup is that it is used remotely as a teaching instrument through their website.

October: Joint ICTP-IAEA College on Plasma Physics @Trieste

[Support ICTP](#)[About ICTP](#)[Visit ICTP](#)

The Abdus Salam
International Centre
for Theoretical Physics
50th Anniversary 1964-2014

[Research](#)[Programmes](#)[Scientific Calendar](#)[Administration](#)

Search

Search in Conferences:

[Overview](#)[Programme](#)[Speakers](#)[Practical info](#)

Support

[✉ smr2369@ictp.it](mailto:smr2369@ictp.it)

Introduction to remote experiments on the GOLEM tokamak

Place

Location: Trieste - Italy

Date: 2 Oct 11:20 - 12:20

[Timetable](#) | [Contribution List](#)

Tue 02/10

[Print](#) [Full screen](#) [Filter](#)

11:00

Introduction to remote experiments on the GOLEM tokamak JAN STOCKEL

12:00

Leonardo da Vinci Building Main Lecture Hall, Trieste - Italy

11:20 - 12:20

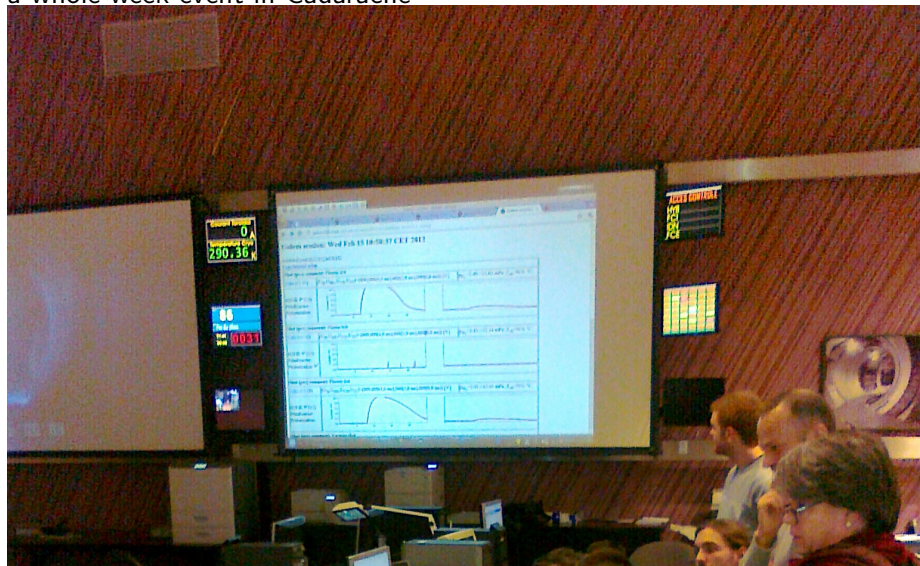
[PDF](#) | [iCal](#)

Organizers

Directors: S. Mahajan, Z. Yoshida, R. Kamendje (IAEA), D. Gomez-Local
Organiser: J. Niemela

February: FUMTRAIC - French fusion masters training course #1

a whole week event in Cadarache





the way to new energy

china eu india japan korea russia usa

search:

Google Custom Search

Search



Construction

Transport

The Machine

The Science

The Organization

The Project

Glossary

General Information



lire [www.iter.org](#) en français

Latest Issue

Newsline Archive

Subscribe to Newsline

News in Brief

New website videos

F4E Newsletter March 2012

Links

"Limitless Power"

"InterFaces"

"Worldwide Fusion Links"

"ITER on Facebook"

"ITER on YouTube"

Conferences

18 May - 22 May, 2015
Plasma Facing Materials &
Components for fusion
applications
Aix-en-Provence, France

20 May - 22 May, 2015
EST-Energy 2015
Karlsruhe, Germany

31 May - 04 Jun, 2015
Symposium on Fusion

iter newsline

Students command 100 plasma pulses, remotely

-Remy Guirlet, CEA

Participants in the French Master's in Fusion Science program have been hard at work since early February at the nearby IRFM (Institut de Recherche sur la Fusion Magnétique), participating in hands-on workshops and attending specialized lectures on magnetic fusion (see Newsline 208).

For the 2012 edition of this annual intensive program a new hands-on project was proposed: taking control—remotely—of the Czech tokamak GOLEM.

The GOLEM Tokamak, formerly CASTOR, was re-installed in 2009 at the Czech Technical University (CTU) in Prague by Dr. V. Svoboda and his students. The Czech team has implemented a reliable and user-friendly interface with the tokamak control and data acquisition systems, allowing graduate and post-graduate students to become acquainted with the operation of a small tokamak and to propose and perform experiments.

Under the supervision of Dr. Svoboda, GOLEM was (almost) exclusively in the students' hands for one week. More than 100 plasma pulses were performed. By groups of two or three, students studied plasma parameters' roles on performance and worked to optimize parameters to achieve the longest plasma. They also investigated conditioning techniques, ion mass number effects, and energy confinement time. Following data analysis and questioning, students presented the scientific results of their experiments at the end of their hands-on session.

The [Master des Sciences de la Fusion](#) is a collaborative training program sponsored by major French institutions of higher education (Aix-Marseille, Bordeaux, Nancy and Paris-Sud Universities, Ecole Polytechnique and CEA-INSTN). Next year's February gathering is expected to draw 40 students. Including students from the pan-European [Erasmus Mundus Master](#)

08 Mar, 2012 - #213

[Send us a comment](#) [view printable version](#)

[<< return to Newsline #213](#)

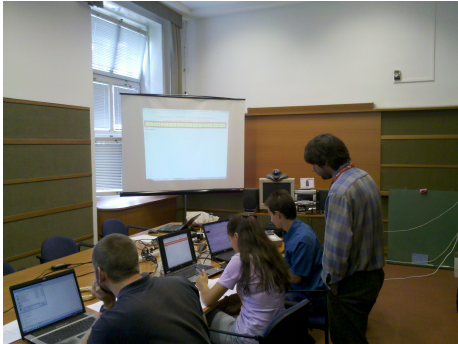
Fusion World



Putting theoretical knowledge to the test and "driving" a real machine.

May: HUNTRAIC #2

Hungarian Training Course for BTE Budapest. Introductory session, more than 90 discharges performed by 3 students.



Annamária Kéri, Máté Halász, Márton Horváth:

Dear Vojtech, We would like to kindly thank you for the opportunity and your assistance during our laboratory exercise. We learned much about the basics of fusion technology, with special attention to tokamak devices, and

Spring: GOMTRAIC (GOLEM training course) #1

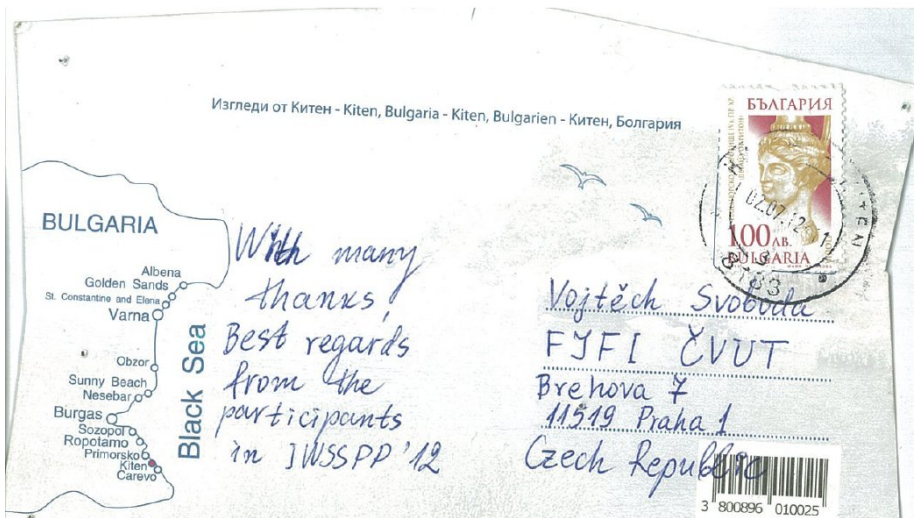


participant:

... It was wonderful experience for me to do experiment under your

June: the 5th International Workshop and Summer School on Plasma Physics. Kiten, Bulgaria

Introductory session, more than 80 discharges performed by 21 students from 5 European countries.



August: SUMTRAIC #4

participant:

Experimentation regarding the optimization of operating parameter was good. Data analysis on the basis of set parameters provide opportunity explore the magnetic fusion physics.