

Training Course on Anomalous Transport in Fusion Plasmas

08/03/2010-12/03/2010 (by Prof. Daniele Carati et al.)

The **EFDA Goal Oriented Training Programme in Theory (GOTiT)** would like to draw your attention to the fifth course out of a series of 2-week and 1-week courses in the field of magnetically confined fusion.

This 1-week course will be covering a variety of topics related to **anomalous transport in fusion plasmas**.

It will be led by Prof. Daniele Carati of the Université Libre de Bruxelles in Bruxelles, Belgium.

It will take place **from 08.03.2010 till 12.03.2010 at the Université Libre de Bruxelles in Bruxelles, Belgium**.

The course is mainly targeted at the trainees who are enrolled with the GOTiT training programme but is also open to graduate students and early career scientists who work in fusion modelling. Mobility funding may be applied for with the respective associations.

The course will cover a variety of topics focusing on anomalous transport in fusion plasmas. Topics which will be discussed include the following:

- Introduction to turbulence in fluids and plasmas
- Theory of anomalous transport
- Experimental aspects of anomalous transport in fusion plasmas
- Gyrokinetic simulations - techniques and codes
- Plasma microturbulence - drive and saturation
- Plasma microturbulence - multiscale effects
- Wave number spectrum of density fluctuations: theory, experiment, and modeling

The course will consist of lectures and practical exercises. All lectures and teaching material will be in English.

The practical parts of the course will be carried out on the *EFDA ITM Gateway cluster* in Portici, Italy which is generously provided by ENEA and the EFDA ITM. Special thanks go to Francesco Iannone for providing temporary accounts on the ITM Gateway.

The material of the course will be made available upon request.

For further information and registration please visit

http://solps-mdsplus.aug.ipp.mpg.de/GOTiT/wp2_course05_index.html