



EUROPEAN FUSION DEVELOPMENT AGREEMENT

Task Force

INTEGRATED TOKAMAK MODELLING

Working Session, 29 November – 3 December 2010

INTEGRATED SCENARIO MODELLING

Welcome and agenda

X LITAUDON & I VOITSEKHOVITCH

TF Leader : G. Falchetto
Deputies: R. Coelho, D. Coster

EFDA CSU Contact Person: D. Kalupin

ISM WS, Culham, 29/11 – 3/12 2010



WELCOME TO JET!

- **Agenda**
- **Local information**
- **Working groups**



Agenda

<p>Monday 29/11 room K1-0-36 Remote Participation 10h-12h30</p>		
10h-10h45	<p>Welcome, Agenda and working groups, Local information, coffee</p>	<p>X. Litaudon I. Voitsekhovitch</p>
10h45-11h30	<p>JET current ramp down experiments for ISM modelling</p>	<p>I. Nunes</p>
11h30-12h30	<p>JET hybrid experiments for ISM modelling</p>	<p>E. Joffrin</p>
14h00-17h30	<p>Working session. K1-0-38 is booked for discussions if needed</p>	

If informal discussions within WG are needed: K1-0-36 is booked for the whole day, K1-0-38 is booked for the whole afternoon

Tuesday 30/11

<p>9h00-16h00</p>	<p>Working session. K1-0-36 is booked for 9.00-13.00 for discussions within WGs</p>	
<p>14h00-16h00 Room K1-0-38</p>	<p>D-T modelling for JET: discussion & coordination of future work (effect of rotation, transport with GLF23, MHD)</p> <ol style="list-style-type: none"> 1. <i>C. Challis: "Summary of DT performance projections for JET and requests for future modelling"</i> 2. <i>H. Weisen "JET alpha heating experiments"</i> 3. <i>I. Voitsekhovitch: "High field/high current DD H-mode scenario – projection to DT operation"</i> 	<p>I. Voitsekhovitch, X. Litaudon, J. Garcia, I. Jenkins, C. Challis, G. Sips, H. Weissen, I. Nunes</p>
<p>16h00-18h00 Room K1-0-38</p>	<p>Remote participation, coffee Reports from working session Benchmark TRANSP-CRONOS for hybrid JET J. Garcia ITER hybrid modelling CRONOS with revised ECRH antenna J. Garcia</p>	<p>All</p>

Wednesday 01/12 room K1-0-36 is booked for the whole day

9h-16h00	Working session	
16h00-18h00	Selection of parameters for EPED simulation	X. Litaudon
Room: K1-0-36	Reports from working session	All
	Coffee	
18.30- ...	Social drink in Abingdon pub!	All

Thursday 02/12

<p>9h-16h00</p>	<p>Working session. For discussions within WGs: K1-0-36 (9.00-13.00), K1-0-38 (14.00-16.00)</p>	<p>All</p>
<p>9.30-10.30 Room K1-0-36</p>	<p>Informal round table discussion: coupling of free boundary equilibrium code and transport code - how this is done in CORSICA</p>	<p>I. Voitsekhovitch, T. Casper, V. Parail, F. Koechl, G. Corrigan, V. Drozdov, D. McDonald, E. Nardon</p>
<p>16.00-18.00 Room K1-0-38</p>	<p>Reports from working session, coffee</p>	<p>All</p>

Friday 03/12

09h-18h	Working session. For discussion: K1-0-36 (9.00-11.00), K1-0-38 (14.00 – 16.30)	All
11h-12h Room K1-0-36	Reports from ISM working session, plans for WS2011 (place, time), coffee	All



Local information

- **Location: mainly K11/168A and K1-1-69A + Paula Belo (K11/178-1, 48-28), Irina Voitsekhovitch (K11/173, 49-49)**
- Florian Koechl (K110/72, 48-52), Johnny Lonroth (K110/70, 52-96), Vassili Parail (Thursday-Friday, K110/74, 46-55), Derek Harting (K110/71, 49-87)**

Luca Garzotti (D3/G12 63-18)

- **Buses to / from JET: 114 & 116 CULHAM SCIENCE CENTRE to Abingdon 07.15; 07.47; 08.32; 09.50; 10.55 then every hour until 15.35; 15.55; 16.50; 18.22**

Abingdon College Wootton Rd 07.46; 08.15; 09.15 then every hour until 14.15; 15.15; 16.26; 17.10

Abingdon Bridge Street 07.50; 08.19; 09.19 then every hour until 14.19; 15.19; 15.50; 16.30; 17.15; 18.35

www.firstgreatwestern.co.uk, www.heyfordiantravel.org

- **Restaurant at Culham Science Centre: 11.50 – 14.00, food shop in K1: 10.30-13.00**

Activity 1

ISM-P1-2010-04

Equilibrium solver and PFDE in ETS: “Coupling of free boundary equilibrium code and transport code – how is it done in CORSICA?” – informal round table discussion

I. Voitsekhovitch, T. Casper, V. Parail, F. Koechl, G. Corrigan, V. Drozdov, L. Appel, D. McDonald, E. Nardon.

Working groups: ACT2

Activity-2

ISM-P2-2010-1 **JET DT extrapolation of the hybrid regime, effect of rotation** Jeronimo Garcia, Irina Voitsekhovitch , George Sips, Clive Challis, Ian Jenkins, Isabel Nunes

ISM-P2-2010-06 **Modelling of JET current ramp down experiments**
Vassili Parail, Johnny Lonroth, Isabel Nunes, Paula Belo for the H-L transition study with EDGE2D (simulations with evolving equilibriumshape), J. Artaud (METIS for validation)

ISM-P2-2010-07 **Current profile diffusion in JET hybrid scenario**
Jonathan Citrin, Dick Hogeweij, Florian Koechl, Emmanuel Joffrin; Irina Voitsekhovitch and Paula Belo for impurity during ramp up

ISM-P2-2010-08 **ASDEX interpretative hybrid modelling** Mireille Schneider, Joerg Hobirk, Jonathan Citrin

ISM-P2-2010-4 **Modelling of DIII-D current ramp up discharges**
Irina Voitsekhovitch, Tom Casper: benchmarking of the Coppi-Tang model, implementation of the Bohm-gyroBohm in CORSICA.

ISM-P3-2010-06 *Hybrid scenario with revised ITER ECRH antenna configuration: 0-D modelling with METIS E. Nardon with help J. Garcia, J. Citrin, J. F. Artaud (remote), J. Johner (HELIOS, remote)*

ISM-P3-2010-08 *Integrated modelling of ITER H-mode scenario including impurities S. Wiesen, P. Belo, F. Koechl, J. Lonroth, V. Parail, D. Harting*

ISM-P3-2010-09 *ITER hybrid current ramp-up and free boundary equilibria calculation D. Hogeweij, F. Imbeaux, F. Koechl, X. Litaudon, T. Casper*

IMP-P3-2010-10 *ITER hybrid MHD stability Johnny Lonroth (+ J. Garcia, J. Citrin) focusing on edge stability and comparison with EPED modelling*

ISM-P3-2010-11 *JT60-SA modelling S. Wiesen, X. Litaudon (0-D modelling), J. F. Artaud (remote), J. Johner (HELIOS, remote)*

ISM-P3-2010-02 *Modelling of deep pellet fuelling in ITER hybrid regime L. Garzotti, F. Koechl*

***Interesting and successful work to
all of us!***