

<b>ITER Organization - Scientific Internships- 2016</b>			
<b>Internship subject</b>	<b>Department</b>	<b>Section/Division</b>	<b>Start</b>
Non-linear MHD ELM simulations with fluid neutrals in high density/low temperature divertor conditions and applications to ITER.	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	2016
Development of synthetic diagnostics for modelling of ITER plasmas with the Integrated Modelling and Analysis Suite	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	2016
Assessment of the sensitivity of core W accumulation to anomalous core transport assumptions and heating schemes in ITER	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	2016
Management of distributed physics workflows. Work on the ITER Integrated Modelling Programme, in particular the Integrated Modelling & Analysis Suite (IMAS)	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	2016
Development of a material migration/tritium retention database	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	2016
Finite element modelling of tungsten cracking and effect of plasma-induced material changes	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	2016
Study of efficiency of tritium recovery by high temperature bake-outs	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	2016
Establishment of sputtering physics database of H/D/T/He on Be/W mixed materials	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	2016
Assessment of and quantification of error components in SOLPS-ITER code simulations	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	2016

Time dependent SOLPS-ITER simulations of Edge Localized Modes	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	2016
Benchmarking SOLPS-ITER simulations of plasma-facing component temperature against experimental measurements on current tokamaks	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	2016
Power deposition mapping on ITER tungsten divertor targets using the SOLPS-ITER and SMITER codes	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	2016
Computation of power handling shaping penalties on ITER beryllium first wall panels using the SMITER code	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	2016
Benchmark of ITER disruption induced first wall panel melting calculations against tokamak data from JET	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	2016
Gas flow characteristics during Massive Gas Injection in ITER	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	Mar-16
Validation of ITER disruption mitigation parameters using experimental data	<b>Science &amp; Operations Department</b>	<b>Science Division</b>	Mar-16
Thermo-mechanical analysis of first wall manufacturing variants	<b>Tokamak Engineering Department</b>	<b>Internal Components Division</b>	Apr-16
Electromagnetic Models for ITER Magnets	<b>Tokamak Engineering Department</b>	<b>Magnet Division</b>	Jan-16
Thermal analysis completion of the ITER Vacuum Vessel & Cryostat Thermal Shield -	<b>Tokamak Engineering Department</b>	<b>Vacuum Vessel Division</b>	2016
CFD (Computational Fluid Dynamic) analysis of ITER Cryostat space room – Evaluation of the Cryostat wall temperature distribution	<b>Tokamak Engineering Department</b>	<b>Vacuum Vessel Division</b>	2016

Non-linear model for elasto-plastic behavior – Application to the prevention of RCC-MR (Design & construction rules for mechanical components of nuclear installations) progressive deformation in the ITER vacuum vessel	<b>Tokamak Engineering Department</b>	<b>Vacuum Vessel Division</b>	2016
Electro-Magnetic Compatibility, including static magnetic field, or electrical and electronic components for the ITER plant systems	<b>Plant Engineering Department</b>	<b>Electrical Engineering Division</b>	ASAP
Nuclear radiation compatibility of electrical and electronic components for the components of the ITER Coil Power Supply System	<b>Plant Engineering Department</b>	<b>Electrical Engineering Division</b>	ASAP
Execution of computer simulations for fault analysis of electrical systems and system stability study	<b>Plant Engineering Department</b>	<b>Electrical Engineering Division</b>	ASAP
Verification of the Stability of Coil Power Supply Control system	<b>Plant Engineering Department</b>	<b>Electrical Engineering Division</b>	ASAP
Construction of the simulation environment for MPD kinematic and dynamic study. - Kinematic calibration of the articulated transporter. Trajectory planning of the articulated transporter	<b>Plant Engineering Department</b>	<b>Remote Handling &amp; Radioactive Materials Division</b>	2016
Thermo-hydraulic transient analyses of Tokamak Cooling Water System (TCWS) by using RELAP 5 code. The analyses focus on operational transients and accidental events as in-vessel and ex-vessel LOCA (Loss of Coolant Accident), LOOP (Loss of Offsite Power) and heat exchanger tube rupture	<b>Plant Engineering Department</b>	<b>Tokamak Cooling Water System</b>	Feb-16

Thermo-hydraulic analysis of Tokamak Cooling Water System (TCWS) main headers by using a CFD code. The analyses focus on thermal fatigue effect on main headers due to the mixing of flow streams at different temperature from different sub loops	<b>Plant Engineering Department</b>	<b>Tokamak Cooling Water System</b>	Apr-16
Study of the tritium transport mechanisms in the ITER Cooling Water System	<b>Plant Engineering Department</b>	<b>Tokamak Cooling Water System</b>	Jun-16
Impact study of the leaks from the primary cooling water system (TCWS) toward the secondary cooling system (CCWS-1) through the heat exchangers during normal operation and accidental events	<b>Plant Engineering Department</b>	<b>Tokamak Cooling Water System</b>	Jun-16
Study of the pre-treatment of liquid effluents in the Safety Drain Tanks after incidental & accidental events in TokamakCWS	<b>Plant Engineering Department</b>	<b>Tokamak Cooling Water System</b>	Mar-16
Development of the Sampling System design for the Cooling Water System	<b>Plant Engineering Department</b>	<b>Tokamak Cooling Water System</b>	Jun-16
Thermo-hydraulic analysis to assess the new design conditions of the new subsystems of CCWS	<b>Plant Engineering Department</b>	<b>Tokamak Cooling Water System</b>	Jun-16
Benchmarking of code used in 3DCS Tokamak Variation Studies	<b>Central Integration Office</b>	<b>Design Integration Section/Division</b>	ASAP
People and Companies Master Data Management	<b>Central Integration Office</b>	<b>Project Information System Section/Division</b>	Jan-16
Centralized Notification System (To-Do List)	<b>Central Integration Office</b>	<b>Project Information System Section/Division</b>	Jan-16

Enterprise Queue Management	<b>Central Integration Office</b>	<b>Project Information System Section/Division</b>	Jan-16
ENG/WEB: Develop mobile app(s) iOS/Android/WM for ITER project to support design/engineering/construction	<b>Central Integration Office</b>	<b>Project Information System Section/Division</b>	Jan-16
EN5: Replication	<b>Central Integration Office</b>	<b>Project Information System Section/Division</b>	Jan-16
EN5: Participate in building the new IT satellites setup in ITER DAs to support remote activities	<b>Central Integration Office</b>	<b>Project Information System Section/Division</b>	Jan-16
LINUX: Bringing our Linux platform to the next level with mainstream deployment & configuration management system	<b>Central Integration Office</b>	<b>Project Information System Section/Division</b>	Jan-16
Configuration and layout structure of the Design Office Web Portal / "techweb"	<b>Central Integration Office</b>	<b>Design Office</b>	Jan-16
Conversion of the Global tokamak Finite Element model for the evaluation of Electro Magnetic loads on ITER tokamak components from ANSYS Classic into Maxwell3D and benchmark	<b>Central Integration Office</b>	<b>Analysis Section/Division</b>	Mar-16
Development of models for nuclear analysis	<b>Central Integration Office</b>	<b>Analysis Section/Division</b>	Feb-16
Engineering documents types: merging the different lists existing, documenting the content of such documents	<b>Central Integration Office</b>	<b>Configuration Management Section/Division</b>	1st half of 2016
Studies "How to integrate requirement management in the PLM?"	<b>Central Integration Office</b>	<b>Configuration Management Section/Division</b>	1st half of 2016

Configuration management models, PLM and mockup: study how to improve the situation and integrate (progressively) the models in the mock-up	<b>Central Integration Office</b>	<b>Configuration Management Section/Division</b>	1st half of 2016
PLM data model: how to improve current data model in particular to ensure traceability of the procedures changes	<b>Central Integration Office</b>	<b>Configuration Management Section/Division</b>	1st half of 2016
Establishing a Sharepoint database to help ROs/SE/TF about system Engineering": a kind of Engineering manual, based on SEP (System Engineering Plan/SEMP) and EN15288/EN9200 giving guidelines, advices, templates	<b>Central Integration Office</b>	<b>Configuration Management Section/Division</b>	Jan-16
Support for the Requirement Management project with F4E	<b>Central Integration Office</b>	<b>Configuration Management Section/Division</b>	Jan-16
Classification of historical standards and documentation in the ITER Archives	<b>Central Integration Office</b>	<b>Configuration Management Section/Division</b>	Mar-16
Implementation of Journal and subscriptions management in the LMS (Library Management System)	<b>Central Integration Office</b>	<b>Configuration Management Section/Division</b>	Apr-16
Implementation of Quick Response (QR) codes and mobile usage of document management system	<b>Central Integration Office</b>	<b>Configuration Management Section/Division</b>	Apr-16