The Welcome ITM platform User Guide

December 17, 2020

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Welcome to the Newcomer's guide to EFDA-ITM platform!

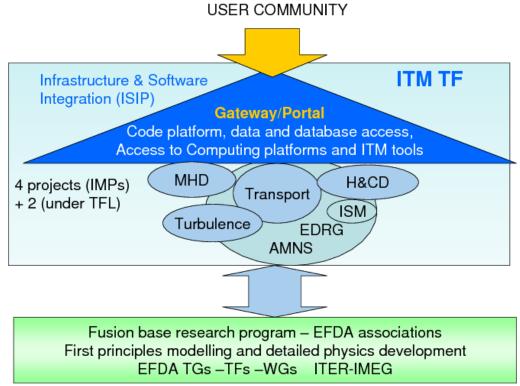
The Integrated Tokamak Modeling ¹ is a project of European Fusion Development Agreement ² with the aim to providing software instruments to forecast and interpret discharges from ITER ³ and from DEMO. Therefore it deals with making codes developed by the European fusion community interact, with promoting the developing of codes on issues not yet faced and with validating the codes themselves.

To this purpose it is organised in 4 Integrated Modeling Projects (IMP12: MHD, IMP3: Transport, IMP4: Turbulence, IMP5: Heating and Current Drive), one Infrastructure and Software Integration Project (ISIP, with the purpose of providing developing and data analysis tools specific for fusion, together with the connective tissue among different codes and with the support to ITM members) and 2 interdisciplinary projects: the Experimentalist and Diagnostician Resource Group (EDRG) and the Atomic, Molecular Nuclear and Surface (AMNS).

¹https://portal.efda-itm.eu/portal/

²http://www.efda.org/

³http://www.iter.org/



Elaborated from P. Strand

Moreover, it disposes of a Linux cluster of 128 cores with a peak performance of 1 teraflops: Gateway ⁴, which can be used for the developing and testing of the codes, and which is provided with *ad hoc* tools of pre- and post- processing and of interconnection between codes. Gateway also hosts the ITM data base storage (100TB), the ITM web site and the ITM cooperative work portal ⁵. For massive production it is possible to use part of the supercomputer with 8640 cores and a peak performance of 0.1 petaflop called HPC-FF ⁶.

Every year at the beginning of September the ITM members meet for the ITM General Meeting to make the point on the advance status of the projects, update about the projects different from their own and learn how to use the new ISIP tools. Here ⁷ it is possible to have a look to previous year meetings to gather an idea about ITM activities

As regards organisation, ITM presents a Task Force Leader with 2 deputy leaders, and a Project Leader with one or more deputy leader for every IMP and for ISIP. Moreover the Gateway User Board, composed with the TFL and the leader of every IMP as a representative of the IMP users, determines the policy of Gateway administration. The EFDA-ITM project is accountable to the EFDA steering committee and its CSU is Denis Kalupin.

Every researcher of a country associated to EURATOM ⁸ is encouraged to cooperate with these projects. To do this the first thing is to contact the Contact Person at your Research Unit ⁹ who will, among other things, provide you with the name(s) of the project leader(s) of the project(s) you are interested in. People outside EURATOM Association interested in joining the task-force need to contact the Task Force Leader. Their request will be considered on an individual basis. The participation is ruled by EFDA calls issued once every year and sent to HRU and Contact Persons. Next call will be in November 2010.

last update: 2011-01-08 by marchett

⁴http://www.efda-itm.eu/

⁵https://portal.efda-itm.eu/portal/

⁶http://www.fz-juelich.de/jsc/juropa/configuration/

⁷http://itm2010.efda-itm.eu/index.php

⁸http://ec.europa.eu/research/energy/euratom/fusion/funding/index_en.htm

https://www.efda-itm.eu/ITM/html/itm_contact_list_2010.html#itm_contact_list_2010