

CALL FOR PARTICIPATION IN THE 2017 PROGRAMME ON MEDIUM SIZE TOKAMAKS

Following the MST1 Planning Meeting that took place in Garching from 14 to 18 November 2016, the MST1 programme has been finalised. For each High Level Topic (HLT) previously defined and with the input of the Scientific Coordinators, experimental time has been allocated to the three MST1 machines: AUG, TCV and MAST-U and the analysis / modelling work to be done has been identified. With the present letter, we invite you to submit proposals for participation in the MST1 programme. The interested scientists are provided with the following documents:

- For each HLT constituting the programme, the experimental team's needs and work to be done to successfully achieve the agreed deliverables are listed in Annex 1. This includes special control room expertise as well as data analysis, predictive and interpretative modelling, modelling extrapolation to ITER & DEMO, and complementary work on non-MST device.
- The present MST1 2017 experimental timeline taking into account the latest operational windows and constraints of each MST device (see Annex 2):
 - **ASDEX Upgrade.** The AUG MST1 campaign will be made of two main parts due to an opening of the AUG machine in August and September. The first part is currently planned from 20 March to 28 July 2017, the second part from 16 October to 15 December 2017.
 - **TCV.** The MST1 TCV campaign will also be in 2 parts due to a power supply refurbishment that should take place in August and September although the exact dates and the length of the break are not yet fixed. The first part is currently planned from 22 May to 21 July 2017, the second part from 9 October to 27 November 2017.

- **MAST-U.** The first MAST-U MST1 campaign is currently planned from 20 November to 15 December 2017.

It is important to note that the MST1-AUG campaign spreads more than initially foreseen. This is due to a significant number of experiments requiring scarce resources (boronisation, reversed field operation, special diagnostics...). As soon as the exact dates/length of the TCV power supply maintenance is known, the timeline will be reviewed to try to further minimise the overlap between TCV and AUG.

- Annex 3 consists of the Excel form to propose participation in the MST1 2017 work programme. There are significant changes compared to the previous year's call.

These changes were implemented with the goal of improving the efficiency of the experimental teams. The main ones are :

- The scientists should choose which pre-defined item they want to contribute to. **It is very important that the proposed participants read Annex1 beforehand.**
- The scientists should propose only the number of weeks they wish to spend at the MST sites and in their home labs, depending of the items chosen. The exact visit dates will be requested in the next step. For efficient implementation of the programme we encourage total participation (including home lab work) in the MST1 campaign of more than 4 weeks. In case of on-site commitment it is advisable to spend at least 2 weeks at each device. Note that we will also accept visits outside the experimental weeks

Guidelines to fill out the Excel form are provided both in Annexes 1 and 3.

- Annex 4 consists of the Excel form to request mission days for maintenance, commissioning of diagnostics issued from collaborations between external research units and the research units hosting the MST and for operation of specific sub system for which external help is required. The list of supported sub systems is listed in the Annex 4. Note that most of the diagnostics listed, require the presence of control room expert when used as well as specific data analysis. This is flagged under the relevant topic in Annex 1 and related work should be proposed in Annex 3. Finally, it is very important to respond to this request thoughtfully. In 2015 and 2016, far more days were requested than effectively used.

The Excel forms with the proposed participation should be sent back to MST1-PARTICIPATION@euro-fusion.org by the Research Unit Scientific Contact Persons by **Wednesday, 18 January 2017**. Assuming that the proposal forms all arrive by this date, the selection will be provided back by the PMU on Monday, 6 February 2017.

At that time, the scientists selected for on-site participation in the MST1-AUG programme will have to provide us with the exact visit dates for the MST1-AUG campaign up to July 2017. Invitation letters will be subsequently sent to the participants.

The request for exact visit dates for the MST1-TCV, MST1-AUG post-August and MST1-MAST-U experimental programmes will be sent at a later stage.

We are aware that the present schedule is very tight but have optimised it as much as possible to fulfil the different constraints.

If you have any question related to this process, you can contact the PMU MST1-PARTICIPATION@euro-fusion.org and the MST1 task force leaders using mst1-tfl@lists.euro-fusion.org (see also [contact info on the wiki pages](#)).

I trust that the strong involvement of your Research Unit in the use of the MST facilities under EUROfusion will continue during this preparation phase of the 2017 experimental campaigns.