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To: Internal & External AUG team (via e-mail)

Subject: Call for proposals to participate in IPP's internal 2026 programme on ASDEX Upgrade

Dear Colleagues,

Following a long AUG tradition, it is my pleasure to ask for your participation in the IPP-internal AUG Programme 2026, which is currently scheduled from Jan 2026 – July 2026. This call applies also to non-IPP colleagues who share a long collaboration with AUG, in particular by installation and operation of diagnostics at ASDEX Upgrade.

This call complements the EUROfusion WP-TE programme for 2026. It is our goal to develop a combined AUG programme, taking advantage of synergies and avoiding overlap of the internal and the WP-TE programme. While participation in the internal programme will not give access to the extra funding through the Consortium, it still offers the chance to conduct experiments at AUG.

In 2026, focus will still be put on the exploitation of the recent PEX Upgrade, namely the new upper divertor Div-IIo with its two coils and the newly installed cryopump, which is being hardened against ECRH and plasma radiation. We will further investigate the alternative divertor configurations, like snowflake and X-divertor with the goal of judging the efficiency of each configuration and developing a metric for this judgement. This will be done in close collaboration with EUROfusion. Still, the integration with various physics scenarios is of interest, like QCE/EDA, X-point radiator, hybrid scenario, RMP ELM suppression, etc.

The exact distribution of shots between Div-IIo related work and other proposals will be determined after the proposal submission has been closed. We expect still a clear emphasis on exhaust physics, leaving less space for non-exhaust related studies than usual. Please note that Div-IIo has no preferred helicity, allowing the switch of B-field direction. Reversing the Ip-direction is currently not foreseen in this campaign, a negative triangularity program has to be decided on the basis of submitted proposals. In the final week(s) of the campaign in July 2026, a hydrogen phase is foreseen.

The purpose of this letter is to invite you to submit experimental proposals for the IPP internal 2026 programme of AUG using the web-based proposal submission system described in attachment 2 of this letter **before October 7th 2025**. Afterwards, an ASDEX Upgrade Ringberg seminar will take place (Oct. 27-31, also via Zoom), where programme emphases will be discussed. The submission system will accept **amendments** to submitted proposals until November 21st.

Best Regards,

Dr. Thomas Pütterich
Project Leader ASDEX Upgrade

Attachments:

1. Guideline for the preparation of your proposals
2. Guideline for using the web-interface for submission of proposals
3. Task force structure
4. List of contact persons

ATTACHMENT 1: Guideline for the preparation of proposals

On the basis of the information given in this letter, in reference 1 and on the AUG internal website (<https://www.aug.ipp.mpg.de/wwwaug/>) you are invited to prepare your proposals.

If you do not have a personal user-id to access the AUG intranet, you can register with your email address under www.aug.ipp.mpg.de/register. By doing this you will quickly obtain a password for the AUG intranet, which enables you to browse through major parts of the documentation.

For your preparation of experiments you might need access to the AUG computer system as well. Such a preliminary access can be obtained on request from one of the IPP contact persons listed in attachment 4. Be aware that this procedure might take a few days, in particular during the holiday season. Once on site, you will get a personal account on the AUG computer system.

- **Submit your proposal by providing all required information at the web-interface <https://www.aug.ipp.mpg.de/proposal2026>.** Follow the guidelines given in attachment 2. Please indicate preferred dates for the execution of your proposal. Submission will be possible **from the 1st of September 2024 onwards, deadline will be October 7th 2025**, with **amendments** possible till November 21st.
- **Submission** of proposals as complement to the Consortium part of the programme is possible, but **has to be earmarked** during the submission process using our web-based interface (see attachment 2).
- All **proposals related to ITPA** have to be earmarked. They will be assessed as all the others.
- **Proposals already submitted for the previous AUG campaign which could not be executed must be re-submitted in the original or a revised version.** They will be considered in the preparation of the 2026 experiments together with new ones.
- **Proposals for all kinds of hardware enhancement, diagnostic operation and development** should be directed to the Project Leader, T. Pütterich ([thomas.puetterich at ipp.mpg.de](mailto:thomas.puetterich@ipp.mpg.de)).
- **It is recommended to discuss your proposal prior to submission either with the Project Leader, the relevant AUG Task Force Leader, or with your personal contact at IPP, in particular if the technical feasibility is in question** (some relevant email addresses are listed in Attachment 3; additional contact information can be found on the IPP webpage <https://max.mpg.de/sites/ipp/IT-Dienste/Telefon/Seiten/Telefon.aspx>).
- External co-workers should anticipate the form of their participation (visits to Garching, remote participation via video conferencing tools, remote computer access) in the 2026 campaign. Please note that the Session leader Zoom meeting works so well that we have decided to keep it even though the Corona pandemic rules are no longer in place. **Experiments with external participation have to be prepared well in advance with the relevant TF contact person or your personal scientific contact person.**
- In the selection process of all submitted proposals, priority will be given to PhD work, diagnostic commissioning and development, work of collaborators who have a long (and successful) history of working at AUG, in particular when they have invested in hardware components and to important work which found no or insufficient space in the Consortium programme. Priority is also given to proposals in line with the main research topics, as given by bullets in the Task Force descriptions below.

ATTACHMENT 2: Guideline for using the web-interface for submission of proposals

A) Introduction: A web-based submission system was used already in previous campaigns. It helped to get a structured response to our call for participation which made it easier to compile, assess and present the AUG programme. This system will be used again in a slightly modified version. All of you who already have an ID and PW for the AUG computer system can access the system by putting the following link into your favourite web browser:

<https://www.aug.ipp.mpg.de/proposal2026>

When asked for ID and PW just use your personal login detail. The webpage is more or less self-explanatory. Information for filling the web-form is given in the summary (section B) below. The submission of your proposal will take only a few minutes. In case you do not have a personal login on the AUG computer system, you have to follow the instructions in section C at the end of this attachment 1.

B) Summary of information required by the web-based interface for submission of proposals

Note: On the web-interface all required input is marked with '*'. **Only when all the required information is provided the system will allow submission.**

- **Title** (max. 25 words)
- **Parallel Submission in the EUROFUSION Consortium Programme** (YES / NO, Default: NO)
- **'Basic Research' activity of the Consortium** (YES / NO, Default: NO)
- **Responsible Officer** = First Author (First Name, Last Name, Research Unit, Email) ¹⁾
- **IPP-contact** (First Name, Last Name, only in case Research Unit is not equal "IPP")
- Phone:
- Fax:
- Co-Authors:
- **Proposed TF** (pull-downlist): You can leave this open by using "Don't know"
- **Proposed SL** (pull-downlist): 'no preference' is default, but you can select an AUG session leader who you propose to prepare the 'Discharge Programme' (DP-file) for executing your discharges.
- Pref. date of execution from To ...
- **ITPA Joint Experiment**: in case the proposal contributes to ITPA Joint Experiments, please indicate this, e.g. IOS-2.1 or DSOL-12
- **Short description** (max. 100 words): Main idea, main information for execution
- **Full description** (upload a pdf File (preferred), or use the input mask): The full description should contain the following sections:
 1. Scientific rationale
 - 1.1. Background
 - 1.2. Goals
 2. Experimental details
 - 2.1. Plasma scenario and additional heating scheme
 - 2.2. Special diagnostic requirements
 - 2.3. Special machine requirements and scarce resources
- **Plasma operation**: 'Yes' for the majority of proposed experiments (default), 'No' for all proposals which do not need AUG tokamak plasmas, because they are of pure technical nature or e.g. offer diagnostic support.

Major parameters of the discharges to be conducted (Will only be visible and have to be filled in prior to submission when 'Plasma operation' = 'Yes')

- **I_p**: allowed input between 0.3 and 1.2 [MA]
- **B_T**: allowed input between 1.2 and 3.5 [T]
- **P_{NBI}**: allowed input between 0 and 20 [MW]

¹ As a default this information will be pre-set using the information from your computer account.

- **P_{ICRH}**: allowed input between 0 and 5 [MW]
- **P_{ECRH}**: allowed input between 0 and 5.5 [MW] O2, X2, X3 (ECRH absorption mode)
- **Gas**: H, D, He, N, Ne, Ar, Kr+D mix, Xe+D mix
- **LSN, DN, USN, UAD** (upper alternative divertor) (configuration)
- **Delta**: low (< 0.3) / high (≥ 0.3) (shaping)
- **Midplane Manipulator probe head**: Field for selection of various heads is given, default = none
- **Use of Magnetic Perturbation Coils** ('B-coils'): [yes, no]
- **Number of dedicated discharges** (max. 50): **Total** number of dedicated discharges
- **Number of piggyback discharges**: **Total** number of discharges belonging to others which you can use for your experiments.
- **Number of shots with**
 - fresh boronization**: Number of discharges to be done during the first three experimental days after a boronization.
 - H operation**: Number of discharges in Hydrogen campaign
 - (He operation**: Number of discharges in Helium campaign) n.a.
 - (Rev. I_p operation**: Number of discharges in rev. I_p / B_T campaign) n.a.
 - Relevance for a thesis**
- Additional Remarks:

C) Submission of proposals without ID and PW

If you do not yet have a user-id at the AUG computer system, you can apply for a "light user-id" by filling out the form at

<https://www.aug.ipp.mpg.de/register>

This "light user-id" can be used to access most parts of the AUG intranet, including those parts which are necessary to prepare and submit a new proposal.

Special resources

Some experiments will require special resources, which will need block-building.

Operation in hydrogen is foreseen at the end of July 2025. Scenarios with negative triangularity may be further developed in 2026, the decision on this will depend on the submitted proposal. No reversal of I_p is planned in this campaign.

ATTACHMENT 3: Task Force structure

We keep 3 Task Forces, the keywords / priority items given below will help you to assign your proposal to the most appropriate TF.

1 Alternative divertor, PWI and exhaust – Tilmann Lunt and Bernhard Sieglin (control)

- Development & assessment of alternative divertor (AD) configurations and scenarios
- Development of AD configuration control
- Impurity transport & migration in the SOL (divertor retention, mixed-layer formation, seeded impurity history effect)
- Divertor PFC performance and damage processes (melting, cracking, arcing), DIM

2 Pedestal and edge – Matthias Willensdorfer

- Pedestal structure
- Type-I ELM free regimes (QCE, EDA, RMP, XPR, etc.) and their integration with AD
- Edge turbulence and basic filament studies
- RMP physics

3 Core physics, transport and MHD – Alexander Bock

- Core transport and turbulence
- Development of integrated operation scenarios
- Physics of fast ions and electrons and related instabilities
- MHD stability in high beta scenarios
- Disruptions

The subtopics are indicative for the selection of the relevant TFLs. A moderate re-arrangement may occur after proposal submission in order to obtain TFs with about equal programme size.

ATTACHMENT 4: LIST OF CONTACT PERSONS

Should you have questions related to this call, please contact one of the persons listed below.

External: +49 89 3299 -

Name	Function	Phone – Ext No	Email ²⁾
Thomas Pütterich	Project Leader ASDEX Upgrade	2599	thomas.puetterich at ipp.mpg.de
Tilmann Lunt	TF 1, Alternative divertor, SOL	1213	Tilmann.lunt at ipp.mpg.de
Bernhard Sieglin	TF 1, Alternative divertor, control	1571	Bernhard.sieglin at ipp.mpg.de
Matthias Willensdorfer	TF 2, Pedestal and RMP	1008	Matthias.willensdorfer at ipp.mpg.de
Alexander Bock	TF 3, Core physics, transport, MHD	1935	Alexander.bock at ipp.mpg.de
Marion Berger	Secretary, E1 and WP-TE	2269	sekmst at ipp.mpg.de
Gabriele Dörsch	Secretary, E2	1816	Gabriele.Doersch at ipp.mpg.de

Submission of proposals only via web-interface

<https://www.aug.ipp.mpg.de/proposal2026>

² Please replace “ at ” by “@” to get a valid email address