Guidelines for Proposal Submission Wendelstein 7-X Operation Campaign OP 2.1 & 2.2

General

- The general entry point to the Wendelstein 7-X web resources is https://w7x-info.ipp-hgw.mpg.de (accessible only from within IPP HGW network and Extranet)
- Proposal submission needs to be done during the submission period 04.04.-30.04.2022 via the web interface to the proposal database: https://w7x-proposals.ipp-hgw.mpg.de/
  Access to the database requires being a member of the W7-X Team. If you wish to submit a proposal and you are not yet member of the W7-X Team, please contact one of the task force leaders. Contact information is provided via https://www.ipp.mpg.de/4144445/proposals
- Detailed information on the capabilities of the W7-X device, heating, fueling and diagnostics components is provided via the Wiki page https://wikis.ipp-hgw.mpg.de/PhysicsW7X/index.php/Detailed_information_for_OP_2.1_and_OP_2.2
- Requests for magnetic field configurations must be issued via the magnetic field database (MagDB) https://w7x-magneticfields.ipp-hgw.mpg.de/

Guidance for proposal scope and choosing magnetic configurations

- The selected requirements must concentrate on the requirements for the conduction of your proposal. Necessary discharge developments as, e.g., increase of heating energy, are not subject to the proposal specification but will be considered in the detailed session planning.
- Each proposal requires to choose at least one magnetic configuration (**MC**), identified via its unique identification number. In the proposal webform, all configurations from MagDB that are listed as *pending* or *released* can be chosen. Multiple magnetic field specifications can be selected if they are required for the physics program of the proposal.

Magnetic Configuration Database (MagDB) and ID Codes

- MCs are uniquely identified via its identification number, e.g. *KJM001+2520*. The code is uniquely linked to a set of (superconducting) coil currents via MagDB.
- The 3-digit running number (e.g. *001*) is automatically assigned by MagDB to distinguish different MCs (i.e. coil current sets) that fall into the same 3-Letter code (e.g. *KJM*). The running number is counting up in chronological order of submission of the MC to MagDB. As MagDB started with a clean table (fresh start after inconsistencies in IDs in OP1), the running numbers can differ between OP1 and OP2. **The "new" IDs from MagDB are the sole reference from now on.**
- If the MC required for a proposal is not yet included in MagDB, it has to be submitted (by inserting the coil currents and setting the status to *pending*). This might even be required for MC that were run in OP1, as not all configurations have been inserted yet.

Paradigm configurations

- If a proposal does not want/need to specify a MC with exact coil currents but only requires a general "type" of configuration (e.g. "High Mirror" configuration), MagDB offers "Paradigm configurations". Choosing one of the paradigm configurations for a proposal implies that the proponent wants the best known version of that configuration (e.g. best known iota correction to account for coil deformation, field strength for specific heating scenario).
- Paradigm configurations are listed in the help text of the proposal webform and, together with a condensed, more physics-centered overview of configurations, on the Wiki page linked above.