## Attachment 2

## NSTX-U Data Usage and Publication Agreement

NSTX-U is an open, fundamental research project whose scientific results are intended for broad publication in the scientific literature. NSTX-U Research is carried out by a multi-institutional collaborative Research Team. All Research Team members are offered full access to NSTX-U data as it is collected and analyzed, with no restrictions on participation in NSTX-U research or publication of scientific results. This privilege entails responsibility by the Research Team members, both on-site and off-site, to ensure that the data are used properly, interpreted correctly, and that appropriate credit is given for the provided measurements, systems operations, and analyses.

The undersigned member of the NSTX-U Research Team agrees to adhere to the following guidelines of the NSTX-U data usage and results publication.

1) No Research Team member will be given direct access to unpublished NSTX-U data until this agreement has been signed by the Research Team member, and submitted to the NSTX-U Head of Physics Analysis.

2) It will be the responsibility of the diagnostic physicists to produce calibrated and validated data in a timely fashion. Such data result from reducing the measured raw signals to a form that can be used for analysis in support of an ongoing experiment or for subsequent analysis, and then validating and releasing by the responsible diagnostic physicist for such use. This data will hereafter be referred to as "validated reduced data".

3) Validated reduced data will be available to the entire NSTX-U group for physics analysis of any type (data analysis, modeling, and theory), pursuant to Item 1. There will be no restriction on any individual, or group of individuals, from performing physics analysis that uses validated reduced data either "between-shots" (in support of the ongoing experiment) or "off-line".

4) Similar to the guidelines for validated reduced data, and pursuant to Item 1, the results of the physics analysis will be available to the entire NSTX-U Research Team. The results of the high-level analysis (between-shots or off-line modeling) are to be validated in a timely fashion, and can be used without restriction to support the physics analysis of any research team member.

5) It is expected that the physicist responsible for the first results from his/her efforts will produce the initial paper on these results as first author in a timely fashion. "Efforts" includes diagnostic measurements, subsystems, experiments, analysis, etc. In general, the publication authorship ordering is:

- a) First Author
- b) Up to two co-authors, for those who have had significant <u>direct</u> input and influence on the work reported. These co-authors can be listed in order of importance to the paper.
- c) Up to two tiers of alphabetically listed authors (irrespective of affiliation), consisting of those who have had direct and indirect input on the work (respectively).

It will be up to the first author to determine how many co-authors and tiers will be included in the authorship list. The Head of Physics Analysis will assist in the mediation of any authorship issues or questions that might arise.

## Attachment 2

6) The Head of Physics Analysis shall oversee the review process for authorship of papers and presentations utilizing NSTX-U data. To ensure adequate review, and as a requirement for external use of a paper for publication or a presentation at meetings, the first author shall circulate the paper or the presentation to coauthors for review and comment. Having done this, the first author shall submit the paper or the presentation, at least 7 days in advance of the external use, to the Head of Physics Analysis. The Head of Physics Analysis or his designee shall, upon receipt, inform the Team and post the material on the Web for Team-wide comment to the first author. The Head of Physics Analysis or his designate may ask an appropriate Team Member to be a "primary" reviewer of the paper. The first author shall address, as appropriate, any comments received. Any disputes or substantive issues about the paper or the presentation that are not resolved among the authors or the Team members shall be mediated by the Head of Physics Analysis to arrive at a mutually agreeable resolution prior to submission and/or external use.

7) The first author of a publication will create the necessary data and metadata files derived from the figures and tables in the publication, in accordance with the PPPL Data Management Plan and OFES guidelines. These files will be sent to the Head of Physics Analysis at the time of the group review, for review and eventual submission to the Princeton University Data Repository. The first author will include the ARK (Archival Resource Key) of the NSTX-U sub-community, in which these files will be stored, in the publication.

8) Presentations and accompanying papers at conferences and workshops of NSTX-U physics results will be coordinated and recommended by the Head of Physics Analysis in consultation with the Team members and the NSTX-U Project and Program Directors. Major presentations will require rehearsal to and comment by the NSTX-U Research Team at an appropriate time and at least one week before travel by the presenters.

9) In order to disseminate knowledge to the full Research Team and the public, presentations and publications will normally be posted on the Web, either at the researcher's home institutions and linked to the NSTX-U website, or directly on the NSTX-U website. In addition, results will be written up and disseminated as a PPPL report or a report of a Research Team member's home institution. Patent clearance according to the policies of the institution issuing the report and acknowledgment of DOE funding (if applicable) are required for all reports. The patent clearance and institutional report system of the first author's home institution will be utilized unless the first author, if not a PPPL employee, chooses to issue the report via the PPPL system.

10) Shortly after a manuscript has been published online, the first author of the publication will inform the NSTX-U Head of Physics Analysis and the NSTX-U Project and Program Directors for inclusion of the publication's abstract or key results in the NSTX-U weekly highlights.

Signature Date
----------------

Institution\_\_\_\_\_