

Dear AAPPS–DPP members,

SI on Negative Triangularity(NT) Tokamak will be published from Plasma Physics and Controlled Fusion (originally planned for NF but did not match its publication schedule).

<https://iopscience.iop.org/collections/ppcf-231109-412>

NT is magnetic hill configuration but exhibits reactor relevant fusion performance and relevant for fusion reactor.

<https://iopscience.iop.org/article/10.1088/1741-4326/ab076d/meta>

<https://link.springer.com/article/10.1007/s41614-021-00054-0>

We already have many planned submission but encourage more papers. Deadline for submission is 30 April 2024.

Regards,
M. Kikuchi, CEO

Special Issue on Advances in the Physics Basis for Negative Triangularity Tokamaks
Guest Editors:

Stefano Coda, Swiss Plasma Center, Ecole Polytechnique Federale de Lausanne, Switzerland

Tim Happel, Max Planck Institute for Plasma Physics, Germany

Mitsuru Kikuchi, AAPPS–DPP, ILE–Osaka University, Southwestern Institute of Physics

Carlos Paz–Soldan, Columbia University, USA

Scope:

Negative Triangularity (NT) tokamak plasmas have been offered as an alternative path to integrate a high performance plasma core with a suitable plasma exhaust solution. NT shaping offers the promise of improving the core confinement, preventing the edge localized mode, and reducing the required power influx into the divertor region, making them an compelling candidate for next–step tokamak fusion devices.

In the past year, NT plasmas have been explored in dedicated experimental campaigns on AUG, DIII–D, and TCV tokamaks. These devices will report their experimental key results within this issue. Additionally, theoretical contributions supporting the improved understanding of NT plasmas will be reported. These results advance the physics basis for NT plasmas, and we are delighted to collect them into a special issue format.

Papers will be solicited in the following topical areas, welcoming both experimental and theoretical contributions:

Core stability, turbulence, and transport
Edge and pedestal physics
Plasma exhaust and divertor integration
Integrated reactor studies

Submission process:

We encourage submissions from all authors whose work fits with the scope of this focus collection. The collection will also feature invited contributions. All focus issue articles are subject to the same review process as regular articles. Authors are invited to contact one of the guest editors, or the PPCF journal team directly, to discuss the suitability of their work prior to submission.

Please submit your article via our online submission form. You should submit the appropriate article type for your submission then choose 'Special Issue on Advances in the Physics Basis for Negative Triangularity Tokamaks' from the drop-down menu.

Deadline for submissions

The target deadline for submissions is 30 April 2024 though we can be flexible where necessary. We encourage early submission where possible, as articles will be published on acceptance without being delayed by other papers in the collection.