

Call for papers – Special issue of Journal of Plasma Physics

Dear Colleague,

The *Journal of Plasma Physics* is creating a new Special Collection entitled "**Solved and Unsolved Problems in Plasma Physics**". This collection is intended as a follow-up to the symposium that will occur in Princeton (New Jersey, USA) in March, 2016 on the occasion of Professor Nathaniel J. Fisch's 65th birthday and will honor the many innovative scientific contributions of Professor Fisch to plasma physics.

The collection of papers that will be published in this Special Issue are aimed to determine, in broad strokes, what was accomplished in fundamental theory and applications of plasma physics within the last 40 years. A unique emphasis is intended to be on open questions and unsolved problems. We hope to survey recent advances and foresee future directions in both research and education. The key topics include:

- physics of magnetically confined plasmas, with an emphasis on plasma interactions with radiofrequency waves, particularly phase space engineering, including radiofrequency current drive and alpha channeling;
- plasma physics for inertial confinement fusion;
- laser-plasma interactions, including the next generation of high intensity lasers and particle accelerators;
- plasma devices, including plasma thrusters and mass filters;
- connection between plasma physics and other scientific disciplines, such as condensed matter physics, astrophysics, and atomic physics.

The collection of papers is intended not as a conference proceedings but rather as a special issue of a regular journal. Thus, papers are expected to be of high quality and will undergo a standard review. We encourage all invited speakers of the symposium to submit their contributions. Submissions from poster presenters will also be considered.

For further inquiries, see the symposium website (<u>https://fisch-fest2016.pppl.gov</u>) or contact the editors. The editors of the Special Issue are Ilya Dodin (PPPL, Princeton University) and Hong Qin (PPPL, Princeton University, USTC).

Best regards,

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