

AAPPS-DPP2022, Oct 9-14 2022, e-Conference APPC-15, Aug 21-26 2022, Gyeongju, Korea

AAPPS-DPP2022 and/or APPC-15 Invited/Plenary Nomination Form

- 0. **Recommender's name, E-mail, and affiliation** Name: David Schaffner E-mail: dschaffner@brynmawr.edu Affiliation: Bryn Mawr College
- Conference(s): select option 1) or 2) or 3) (strikethrough or delete) 1) AAPPS-DPP2022 2) APPC-15 3) AAPPS-DPP2022 & APPC-15
- Session category: Choose one of the sessions categories CD:Cross Disciplinary, F:Fundamental, B:Basic, A:Applied, L:Laser, SG:Space & Geomagnetism, SA:Solar & Astro, MF1:Magnetic Fusion(core), MF2: MF(edge) (strikethrough or delete)

AAPPS-DPP 2022: **CD**, **F**, **B**, **A**, **L**, **S**, **SA**, **MF1**, **MF2** APPC-15: **B**+**A**, **SA**+**SG**, **MF**

3. Type: Plenary or Topical Plenary or Invited (strikethrough or delete)

4. Speaker:

Name David Schaffner E-mail: dschaffner@brynmawr.edu Affiliation: Bryn Mawr College

5. Rationale:

The Bryn Mawr Plasma Laboratory at Bryn Mawr College is now fully operational and starting to run data campaigns. The work is focused on understanding magnetic turbulence that is relevant to astrophysical and heliospherical realms but conducted in a laboratory setting. It is designed to complement computational and observational studies of plasma turbulence in the solar system. It is also a research project based at a primarily undergraduate women's institution and thus has a unique educational impact and the opportunity to broaden diversity in the field of plasma physics.

6. Short abstract for 6th Asia-Pacific Conference on Plasma Physics, APPC-15

Authors: David Schaffner

Title: Plasma Turbulence Studies in a Laboratory Wind Tunnel

Short Abstract: Studying turbulence is an integral component of understanding plasma behavior from fusion devices to interstellar space. While much work has been done studying turbulence in laboratory fusion settings, less has been attempted in the laboratory for turbulence associated with space, such as the solar wind. The Bryn Mawr Experiment (BMX) at the Bryn Mawr Plasma Laboratory (BMPL) has been designed as a plasma wind-tunnel to explore the characteristics and dynamics of turbulent magnetized plasma without a strong background field, better mimicking the boundary conditions found in space. This talk will give an overview of the development of this approach and the most recent results from BMPL on measurements of dissipation scales and broadband magnetic fluctuation spectra.