



## OPPORTUNITIES FOR COLLABORATION & RESEARCH PROPOSALS for DIII-D in 2017-8

The DIII-D National Fusion Facility is inviting collaboration in its 2017-8 program commencing in the Fall. This is a nationally and internationally collaborative research program amongst ~90 institutions. Collaborators manage elements of the program, generate ideas and innovations, lead experiments, build and operate diagnostics and other equipment, analyze data, provide theory and modeling support, and report and publish results world wide. Opportunities also exist for graduate and undergraduates students.

The overall goal of the DIII-D program is to establish the scientific basis for the optimization of the tokamak approach to fusion energy. Research covers a broad spectrum of important foundational scientific work, but in 2017 will include particular foci on developing the basis for  $Q=10$  in ITER, ELM control, rotation projection and divertor development, as well as a new Core-Edge Integration Task Force and support for long pulse development in collaboration with the EAST facility.

Experiments in the coming year will benefit from developments electron cyclotron heating, improved disruption mitigation systems, a recent power supply upgraded from ASIPP China for enhanced 2-D/3-D field capabilities and the new SAS divertor and increased closure main upper divertor, as well as improved diagnostics such as gamma ray and ECE imaging, and divertor measurements. A hallmark of the DIII-D program is its emphasis on model validation enabled by a world-leading diagnostic set, which benefits from many high resolution 1D, 2D and 3D diagnostics and extensive arrays of magnetic diagnostics, as well as additional visible and infra-red imaging systems.

**An online Research Opportunities Forum is commencing in June**, in which proposals for fusion energy research are invited from all interested scientists. (A later process will also solicit Frontiers Science proposals). Proponents are encouraged to contact the relevant physics experts overleaf to discuss their ideas, and present to the relevant physics area meeting. A web based proposal submission system will go live to enable proposals, in June 2017 at link: <https://fusion.gat.com/global/Rof2018>.

*We look forward to your participation.*

