

FSP & SciDAC Update

John Mandrekas

*Office of Fusion Energy Sciences
Office of Science, U.S. Department of Energy*

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- Following a successful peer-review of the multi-institutional FSP proposal (submitted in response to Program Announcements LAB 09-04 & DE-PS02-09ER09-04) OFES decided to fund the FSP team to carry out a 2-year planning study for the FSP
 - Consistent with FESAC and ASCAC recommendations
 - FSP planning team is led by PPPL (PI: W. M. Tang) and includes 6 DOE National Labs, 9 Universities, and 2 Private Companies (ANL, LANL, LBNL, LLNL, ORNL, PPPL, Columbia U, Lehigh U, MIT, Purdue U, UCSD, U Chicago, U Colorado, U Texas, NYU, GA, & Tech-X)
 - Funding levels: **\$2M** for FY 2009, **\$4M** for FY 2010
 - Planning activities started in July 2009 (kickoff meeting at PPPL) and will be completed in July 2011
 - An independent review will be held at the end of the 2-year planning study; Based on the outcome of this review and appropriated funds, the full FSP will be launched in FY 2011

- OFES will maintain a core SciDAC portfolio
 - The “proto-FSPs” (CPES, SWIM, FACETS) will eventually be integrated into the full FSP
- The expertise of the existing SciDAC teams is an important resource for the success of the FSP detailed planning study. Among the deliverables of the FSP planning study are:
 - Comprehensive assessment of the present computational capabilities of the fusion community in terms of major simulation codes, numerical algorithms, computational science tools (data management, visualization, code performance tools, etc.), computational frameworks, interface standards, code scalability, and other related issues. Identification of major gaps and weaknesses, and suggestions for the path forward should also be addressed
 - Integration and coordination of the FSP with the projects in the FES SciDAC portfolio, including the process for incorporating results from the FES SciDAC Centers into the FSP
 - Integration and coordination of the FSP with other SciDAC (non-FES) Centers, and in particular with SciDAC Institutes and Centers for Enabling Technologies (CETs), as well as with efforts supported by the OASCR Applied Mathematics program
 - Integration and coordination with the FES analytic theory and modeling program, including the process for incorporating improved theoretical models into the FSP simulation codes and engaging the help of the FES theory community to address gaps in the physics models implemented in the FSP codes
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- 2010 is the last budget period of almost all the projects in the FES SciDAC portfolio (except FACETS, which ends in FY 2011)
 - Cooperative Agreements expire between February 14 – March 31, 2011
- An announcement for the submission of renewal and / or new SciDAC applications will be issued in 2010– additional guidance to the community will be provided
- CPES and SWIM (which are co-funded by OFES and OASCR) will be considered separately