Abstract Submitted for the DPP17 Meeting of The American Physical Society

Installation and Testing of ITER Integrated Modeling and Analysis Suite (IMAS) on DIII-D¹ L. LAO, M. KOSTUK, O. MENEGHINI, S. SMITH, G. STAEBLER, General Atomics, R. KALLING, Kalling Software, S. PINCHES, ITER — A critical objective of the ITER Integrated Modeling Program is the development of IMAS to support ITER plasma operation and research activities. An IMAS framework has been established based on the earlier work carried out within the EU. It consists of a physics data model and a workflow engine. The data model is capable of representing both simulation and experimental data and is applicable to ITER and other devices. IMAS has been successfully installed on a local DIII-D server using a flexible installer capable of managing the core data access tools (Access Layer and Data Dictionary) and optionally the Kepler workflow engine and coupling tools. A general adaptor for OMFIT (a workflow engine) is being built for adaptation of any analysis code to IMAS using a new IMAS universal access layer (UAL) interface developed from an existing OMFIT EU Integrated Tokamak Modeling UAL. Ongoing work includes development of a general adaptor for EFIT and TGLF based on this new UAL that can be readily extended for other physics codes within OMFIT.

¹Work supported by US DOE under DE-FC02-04ER54698.

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Date submitted: 06 Jul 2017 Electronic form version 1.4