Abstract Submitted for the DPP99 Meeting of The American Physical Society

Sorting Category: 5.1.1.2 (Experimental)

Divertor Geometry Effects on Particle Pumping in **JT-60U and DIII-D** 1 H. TAKENAGA, A SAKASAI, H. KUBO, N. ASAKURA, Japan Atomic Energy Research Institute, M.J. SCHAF-FER, T.W. PETRIE, M.A. MAHDAVI, D.R. BAKER, General Atomics, S.L. ALLEN, G.D. PORTER, T.D. ROGNLIEN, M.E. RENSINK, Lawrence Livermore National Laboratory, D.P. STOLTER, C.F.F. KARNEY, Princeton Plasma Physics Laboratory — Several types of pumped divertors have been installed in tokamaks. It is important to compare the pumping characteristics with different divertor geometries for optimization of the divertor pumping scheme. In the W-shaped divertor of JT-60U with the pumping from the inner private flux region, the divertor pumping rate was estimated to be 2.4% of the divertor particle flux in the high density region, and it depended strongly on the main plasma density. In DIII–D with the pumping from the outer divertor region, a large divertor pumping rate was observed, due to the pumping configuration. Also a strong dependence on the main plasma density was observed. The comparison of the pumping characteristics between JT-60U and DIII–D will be presented based on analysis results using the UEDGE/DEGAS2 modeling.

¹Supported in part by JAERI and by U.S. DOE Contracts DE-AC03-99ER54463, W-7405-ENG-48, and DE-AC02-76CH03073.

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Prefer Oral Session Prefer Poster Session D.R. Baker baker@gav.gat.com General Atomics

Special instructions: DIII-D Poster Session 2, immediately following JR Watkins

Date printed: July 16, 1999

Electronic form version 1.4