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**Comparison of 2D VUV Emission Profiles with Simulations at High and Low Triangularity in DIII-D**<sup>1</sup> N. JALUFKA, Hampton University, M.E. FENSTERMACHER, G.D. PORTER, Lawrence Livermore National Laboratory, R.A. COLCHIN, Oak Ridge National Laboratory, A.W. LEONARD, General Atomics — One of the dominant radiators in the DIII-D divertor during both attached and detached divertor operation is CIV VUV emission at 155 nm [R.D. Wood, EPS, Kiev, 1996]. The 2D emission profile of this CIV radiation is obtained from a unique tangentially viewing VUV camera [D.G. Nilson, Rev. Sci. Instrum. **738**, 1999] and topographic reconstruction techniques. Analysis of the evolution of the 2D CIV profile has improved our understanding of the power balance leading to divertor detachment [M.E. Fenstermacher, EPS, Maastricht, 1999]. Recent CIV measurements in high triangularity (high- $\delta$ ) plasmas will be compared with the previous measurements for low- $\delta$  shapes in both attached and detached operation. The measured profiles will also be compared with reconstructions of total radiated power from bolometer arrays and with simulations of CIV emission using the UEDGE fluid code [T.D. Rognlien, J. Nucl. Mater. **347**, 1992].

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- Prefer Oral Session  
 Prefer Poster Session

M.E. Fenstermacher  
max.fenstermacher@gat.com  
Lawrence Livermore National Laboratory

Special instructions: Divertor, immediately following ME Fenstermacher

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