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**H-mode edge physics in NSTX and Alcator C-Mod** F. KELLY, R. MAQUEDA, Nova Photonics, R. MAINGI, Oak Ridge National Laboratory, AND THE NSTX TEAM — In NSTX (National Spherical Torus Experiment), ELMs (Edge Localized Modes) are observed using a fast-framing camera to interact with an inner-wall MARFE (Multi-faceted Asymmetric Radiation From the Edge), leading to partial burn-through of the MARFE during the ELM cycle [1]. We reexamine the MARFE stability [2] to attempt an explanation of the MARFE/ELM dynamics in NSTX. The contribution of ion self-diffusion [3,4] to the radial electric field is estimated for an L-H transition in Alcator C-Mod.

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