Abstract Submitted
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Interpretation of Edge Turbulence Images near the X-point of Alcator C-Mod[1] STEWART ZWEBEN, PPPL, JAMES TERRY, BRIAN LABOMBARD, MARTIN GREENWALD, MIT, OLAF GRULKE, IPP, RONALD COHEN, DMITRI RYUTOV, MAXIM UMANSKY, LLNL, TIM STOLTZFUS-DUECK, JOHN KROMMES, PPPL — Recent images of edge turbulence taken just outboard of the typical X-point location in Alcator C-Mod show a very different structure and motion from those taken near the outer midplane (see previous talk). We interpret these differences using a model in which the structures are formed near the outer midplane and affect the X-point region through fluctuations propagating along the field lines (most likely electrostatic potential fluctuations). The structural differences are then due to the shearing and flux expansion of the magnetic field between the outer midplane and the X-point, which distort circular 'blobs' at the midplane into radial 'fingers' near the X-point. Various tests of this model will be discussed and a comparison of the near-X-point images with a BOUT simulation will be described.

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