Abstract Submitted
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Blobs localized in the divertor region D.D. RYUTOV, R.H. COHEN, Lawrence Livermore National Laboratory — X-point shear may effectively decouple toroidally-asymmetric plasma perturbations in the divertor region and main SOL. In Ref. 1, we found that in such a situation there may exist blobs localized entirely in the divertor region. Here we extend this analysis to include effects of the finite plasma pressure, in combination with the radial tilt of the divertor plate. We provide an analysis of strange blobs localized in the private flux region. We discuss also the situations where plasma is detached from the divertor plates, and resistive effect in a cold transitional plasma become important. These divertor blobs may lead to damage to those parts of the divertor which are normally thought of as inaccessible for the plasma flux. Work performed for DoE by UC LLNL under contract No. W-7405-Eng-48.
[1] R.H. Cohen, D.D. Ryutov. Contrib. Plasma Phys., 46, # 7-9, 2006.

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