Microinstability Calculations for Transport Barriers[1] MIKE
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Comprehensive gyrokinetic stability calculations are performed using GS2 for transport barrier equilibria generated by VMEC. Edge barriers are examined for free boundary equilibria with X-points. These are the first gyrokinetic calculations in such equilibria where the magnetic geometry near the X-point could be potentially significant. Comparisons with present experiments and extrapolation to reactors will be presented. We also examine whether novel magnetic divertors can improve pedestal stability.

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