

Abstract Submitted
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Kinetic analysis of resistive wall modes in ITER¹ LINJIN ZHENG,
M. KOTSCHENREUTHER, J.W. VAN DAM, University of Texas - Austin, Insti-
tute for Fusion Studies — The stability of resistive wall modes (RWMs) is an issue
of concern for ITER. So far several critical issues related to RWM stabilization in
ITER have not been clarified, such as the coupling of the kinetic and shear Alfvén
resonances, the parallel electric field effects, etc. To resolve these issues, we develop
the AEGIS-K code, which features the adaptive numerical scheme for including the
shear Alfvén resonance and the non-hybrid kinetic treatment based on our newly de-
veloped gyrokinetic theory [Phys. Plasmas **14**, 072505 (2007)]. The stability results
will be presented, and the underlying physics will be discussed.

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Linjin Zheng
University of Texas - Austin, Institute for Fusion Studies

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