

Abstract Submitted  
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**Continuum absorption in the vicinity of the toroidicity-induced Alfvén gap**<sup>1</sup> MENG LI, BORIS BREIZMAN, LINJIN ZHENG, Institute for Fusion Studies, The University of Texas at Austin — This work examines the resonant dissipative response of the Alfvén continuum to an oscillating driving current when the driving frequency is slightly outside the edges of the toroidicity-induced spectral gap. The problem is motivated by the need to describe the continuum absorption in the frequency chirping events for energetic-particle-driven modes. A key element of this problem is the negative interference of the two closely spaced continuum crossing points. We explain why the continuum absorption can have very different features. This difference is closely related to the Toroidicity-induced Alfvén Eigenmode(TAE) theory that the eigenmode frequency can be arbitrarily close to the upper edge of the gap, whereas the lower edge of the gap is always a finite distance away from the closest eigenmode.

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