MHD WAVES IN ASYMMETRIC WAVEGUIDES: BUILDING THEORY AND PREPARING HIGH-RESOLUTION APPLICATIONS

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The theory of magneto-acoustic waves propagating in a homogeneous magnetic slab is further developed, by enclosing it in an asymmetric magnetic environment. The new, mixed character quasi-sausage and quasi-kink eigenmodes are explored. Finally, analytical and numerical solutions for the dispersion relation are provided for parameter sets representative of observable solar waveguides (such as prominences).