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Acoustic streaming in the cochlea under compressive bone conduction excitation KATHERINE AHO, MEGHA SUNNY, TAOUFIK NABAT, JENNY AU, CHARLES THOMPSON, University of Masachusetts Lowell — This work examines the acoustic streaming in the cochlea. A model will be developed to examine the steady flow over a flexible boundary that is induced by compressive excitation of the cochlear capsule. A stokeslet based analysis of oscillatory flows was used to model fluid motion. The influence of evanescent modes on the pressure field is considered as the limit of the aspect ratio epsilon approaches zero. We will show a uniformly valid solution in space.

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