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## The properties of compressive oscillations in hot coronal loops

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Flare-associated hot coronal loops often display compressive plasma oscillations involving a density perturbation moving back and forth between the foot points of the loop. These oscillations, sometimes referred to as, “sloshing oscillations”, exhibit properties very similar to the standing slow waves that were discovered much earlier with the SoHO/SUMER and other spectroscopic instruments. Utilising the multi-wavelength high-resolution imaging observations from SDO/AIA, we have recently shown that the sloshing oscillations eventually transform into a standing slow wave. The oscillation properties and the associated change between the two phases with respect to the evolving physical conditions within the loop, will be discussed. By analysing multiple examples, we also present the possible initial conditions under which such an oscillation may be setup.

### Student poster?

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