



Contribution ID: 546

Type: **Poster**

MHD wave propagation in asymmetric solar waveguides

Wednesday, 8 September 2021 09:52 (13 minutes)

We present our findings on MHD wave propagation and instabilities in asymmetric Cartesian waveguide models. Generalising the classical slab models this way, thanks to the introduction of various sources of asymmetry (background density, magnetic field or flow speed) allows us to more precisely investigate several important features in the richly structured solar atmosphere. By developing solar magneto-seismologic methods from these analytical models, we can provide an efficient tool for obtaining further information about the solar plasma from observations. We offer further detail on the types and parameters of MHD waves expected to propagate and be observable in a number of multi-layered systems of the solar atmosphere (such as e.g. magnetic bright points or light walls) with new, high-resolution technology.

Primary authors: Ms ZSÁMBERGER, Noémi Kinga; Prof. ERDÉLYI, Robertus

Presenter: Ms ZSÁMBERGER, Noémi Kinga

Session Classification: Poster Session 5.4

Track Classification: Session 3 - Fundamental Plasma Processes in the Solar Atmosphere: Magnetic Reconnection, Waves, Emission, Particle Acceleration