

Contribution ID: 202

Type: Poster

MHD waves in chromospheric fibrillar structures as observed with ALMA

Thursday, 9 September 2021 11:13 (13 minutes)

Waves and oscillations have been shown as a prime means of transporting energy through the solar atmosphere, thus, contributing to the high temperature of the upper layers. In particular, magnetohydrodynamic (MHD) waves are observed in a number of structures in the solar chromosphere, often with observations in the near-ultraviolet (UV) to infrared wavelength range. In this poster, we present our recent work on identification of MHD wave modes in a number of fibrillar structures using high-temporal resolution (i.e., 2~s cadence) observations with the Atacama Large Millimeter/submillimeter Array (ALMA) in Band 6 (centred at 1.2~mm). Such oscillations are further compared with those identified in observations at near- and far-UV wavelengths (i.e., Mg ii k and C ii spectral lines) with the Interface Region Imaging Spectrograph (IRIS) space telescope.

Student poster?

Primary authors: SABERI, Maryam (University of Oslo); Dr JAFARZADEH, Shahin (University of Oslo); Dr GAFEIRA, Ricardo (University of Coimbra); Dr WEDEMEYER, Sven (Rosseland Centre for Solar Physics, University of Oslo, Norway); Dr SZYDLARSKI, Mikolaj (University of Oslo)

Presenter: SABERI, Maryam (University of Oslo)

Session Classification: Poster Session 10.4

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