







-  [NAM2021](#)    [Science](#) ▾    [Social](#) ▾    [Media](#)
-  [Public Engagement](#) ▾    [Venue](#) ▾

# Parallel sessions

## Sessions

Session title Chromospheric dynamics and energy transport

Abbreviation Chromospheric Dynamics

Description The solar chromosphere is a challenging region to study from both theoretical and observational standpoints. Effects such as non-equilibrium ionisation, non-Local Thermal Equilibrium, 3D scattering effects, and partial redistribution of frequencies are often critical to model and interpret observed features. Moreover, this region is a crucial for understanding the Sun's atmosphere since it acts as a conduit for energy, connecting the pressure dominated photosphere, and the magnetically dominated corona, as well as acting as in interface with the corona that can influence coronal heating.

The complexity of the solar chromosphere requires the development of new observational and numerical techniques that untangle the physics of this tumultuous region. This session will address these issues, presenting the latest techniques to accurately stitch together then science of the corona and the photosphere by analysing the dynamics and energy transport through the chromosphere. With the new generation of satellites and ground based telescopes looming, launching and preparing for first light, it is a fruitful time for both modeling and observing new behaviors in features such as fibrils, spicules, pores, vortices, and jets, as well as events like flares, Ellerman bombs and UV bursts.



**Royal  
Astronomical  
Society**



Schedule:

Schedule:

#### Session 1

16:02 Jorrit Leenaarts "Recent progress in understanding chromospheric heating"

16:25 Yamini K Rao "Non-Thermal Distribution of Si IV in Quiet-Sun"

16:38 Mariarita Murabito "The magnetic nature of two chromospheric vortices"

16:51 Ryan Milligan "Lyman-alpha Variability During Solar Flares"

17:04 Alexander Pietrow "Physical properties of a Fan-Shaped jet backlit by an X9.3 flare"

17:17 Valentina Zharkova "The first sunquake with a second bounce: observations and interpretation"

#### Session 2

09:02 Tobias Felipe "Numerical modelling of umbral flashes" (Invited)

09:25 Julia M. Riedl "Acoustic wave properties in footpoints of coronal loops in 3D MHD simulations"

09:38 Beatrice Popescu "Effects of ambipolar diffusion on waves in the solar chromosphere"

09:51 Roger Dufresne "Modelling ion formation in the lower solar atmosphere"

10:04 Shaun McLaughlin "Radiative Hydrodynamic Modelling Of The Lyman Continuum During Solar Flares"

10:17 Giulio Del Zannah "Solar Atmospheric Modelling Suite (SAMS) - a proposed UK chromospheric radiation-hydrodynamics suite of codes"

Organiser(s) Malcolm Druett, Ben Snow

Schedule Monday afternoon and Tuesday morning

Location

[GO BACK](#)

All attendees are expected to show respect and courtesy to other attendees and staff, and to adhere to the NAM Code of Conduct.

© 2021 Royal  
Astronomical Society

[Login](#)