WG4: “selected topics”

Thursday 11:00: Chromosphere/photosphere/corona response

Friday 9:00: Dips/Cutoffs/transport/ and electron spectra

Friday 11:00: Electron fluxes and spectra

WG4 speakers

Ryan Milligan
Zongjun Ning
Larisa Kashapova
Weiqun Gan
Juan Martinez-Oliveros
Ewan Dickson
Calum Alexander
Gordon Emslie
Iain Hannah
John Brown
Victor Melnikov
Valentina Zharkova
Gordon Holman

A) Chromosphere/photosphere/corona response

Energy deposited by an electron beam and response of the atmosphere

Temperature and plasma motion observations in footpoints

Colder and hotter plasma kinematics

What are the radio signatures of the chromospheric evaporation

Photosphere response - observations of seaquakes

B) Dips/cutoffs/transport and electron spectra

Photospheric albedo and directivity of X-ray emission

Free-bound emission

Collisional transport

Wave-particle interactions (via Langmuir waves)

C) Electron spectra and fluxes

The physical processes considered:

Binary collisions

Magnetic mirroring

Return current

Non-uniform ionisation

Conclusions I:

Theory/modelling: Probably adequate understanding of many *individual* processes

Observations: Equally good/detailed measurements of specific parameters

Conclusions II:

Lack of understanding of interplay between different processes: Are the processes complementary or excluding?

Probably we do not use successfully all aspects of available data sets. Can the spectral analysis be better complemented by imaging, other wavelength observations?

More comparisons and discussions between theory and observations are needed

What is the way forward?

Working groups focussed on selected topics at the next workshops

Pre-workshop discussion/email exchange between “theorist” and “observers”

Focus on the models/observations highlighting the interplay between different processes

Focus on the observations using various data sets/methods

Other suggestions?