

# ISSI Bern Team Flare-SEP 25<sup>th</sup> Feb – 1<sup>st</sup> Mar 2019

Draft schedule for the first meeting:

- Each person has an hour for talk and discussion so we suggest that **talks are ~30-40 mins so we have a short time for discussion and questions at the end of each talk.**
- We are going to try and keep to the schedule, i.e. we will stop the discussion at the end of your allocated time and any further discussion can be continued during the **allocated discussion times at the end of the day**, so everyone can talk at their scheduled time and get sufficient breaks to keep things productive each day!

## Monday 25<sup>th</sup> February

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| <b>14:00-14:15</b> | <b>Maurizio Falanga</b> - Welcome to ISSI  |
| <b>14:15-15:00</b> | <b>Natasha Jeffrey/Frederic Effenberger</b> - Aims of the project/first meeting  |
| <b>15:00-15:30</b> | <b>Break</b>   |
| <b>15:30-16:30</b> | <b>Natasha Jeffrey</b> – Coronal plasma properties and determining the properties of solar flare-accelerated electrons |
| <b>16:30-17:30</b> | <b>Frederic Effenberger</b> - Flaring region modelling with SDE methods and the relation to SEP modelling              |
| <b>17:30-18:00</b> | <b>ISSI welcome drinks</b>   |
| <b>19:00?</b>      | <b>Welcome dinner?</b>   |

## Tuesday 26<sup>th</sup> February

- 09:00-09:30**      **Coffee**
- 09:30-10:30**      **Alexander Warmuth** - Constraining electron acceleration: X-rays, radio, and additional spectral regimes.
- 10:30-11:30**      **Eduard Kontar** - Solar energetic electrons in the inner heliosphere: particles, plasma waves and radio emission
- 11:30-12:00**      **Break**
- 12:00-13:00**      **Nicolas Bian** - Ups and downs: modelling the first arrival times of energetic electrons at 1AU & the effect of magnetic convergence on the diffusion of flare accelerated electrons in coronal loops
- 13:00-14:30**      **Lunch**
- 14:30-15:30**      **Discussion:** *Monday + Tuesday talk topics (mainly acceleration and transport issues at the Sun/high corona)*
- 15:30-16:00**      **Break**
- 16:00-17:00**      **Discussion (as above):**
- *Different plasma environments and different transport processes at the Sun, upper corona, and in the heliosphere?*
  - *How do we best determine the properties of the acceleration region(s)?*
  - *Role of transport versus acceleration?*
  - *State-of-the art modelling?*
  - *Current observational evidence?*
  - *Results from remote observations.*
  - *Continued discussion from talks.*

## Wednesday 27<sup>th</sup> February

- 09:00-09:30**      **Coffee (+ a quick discussion summary if required)**
- 09:30-10:30**      **Nina Dresing** - Energy spectra of solar energetic electron events observed by STEREO/Widespread SEP events and multi-spacecraft observations.
- 10:30-11:30**      **Du Toit Strauss** - Modelling electron transport in the inner heliosphere.
- 11:30-12:00**      **Break**
- 12:00-13:00**      **Gang Li** - Fieldline meandering and Supergranule on the Sun -- what observations can constrain the perpendicular diffusion of energetic particles
- 13:00-14:30**      **Lunch**
- 14:30-15:30**      **Timo Laitinen** - Particle propagation along meandering field lines: how to determine the length of the meandering path?
- 15:30-16:00**      **Break**
- 16:00-17:30**      **Discussion:** *Wednesday talk topics (transport issues in the heliosphere)*
- *Best ways of modelling electron transport in the heliosphere?*
  - *What do we know from current in situ observations?*
  - *How are we going to use new in situ observations?*

## Thursday 28<sup>th</sup> February

- 09:00-09:30**      **Coffee (+ a quick discussion summary if required)**
- 09:30-10:30**      **Junxiang Hu - ?**
- 10:30-11:30**      **Vahé Petrosian** - Connections between flare Radiation Producing Particle (RPPs) and Solar Energetic Particles (SEPs): The role of RPPs in production of SEPs and the role of SEPs in producing radiation.
- 11:30-12:00**      **Break**
- 12:00-13:00**      **Sophie Musset** - Energetic electrons in flare-related jets
- 13:00-14:30**      **Lunch**
- 14:30-15:30**      **Karl-Ludwig Klein - ?**
- 15:30-16:00**      **Break**
- 16:00-17:00**      **Lindsay Glesener** (*remote from Minnesota*) - Hard X-ray observations of accelerated electrons in small microflares.
- 17:00-18:00**      **Discussion:** *Thursday talk topics (related events – flare-jets/CMEs)*
- *Insights from ions/gamma-ray observations?*
  - *Acceleration and transport in flare-jets/CMEs?*
  - *Differences and similarities in the properties of different particle populations in flares only, and flare-jet/CME events?*
  - *What do we know from current observations and theory?*
- 19.30-**              **End of meeting dinner?**

## **Friday 1<sup>st</sup> March**

- 09:00-09:30**      **Coffee (+ a quick discussion summary if required)**
- 09:30-10:30**    **N. Jeffrey/F. Effenberger – Summary of the week**
- 10:30-11:30**    **Future/on-going work/plans for meeting two**
- 11:30-12:00**    **Break**
- 12:00-13:00**    **Future/on-going work/plans for meeting two (if more time is required/any additional discussion time)**
- 13:00-14:30**    **Lunch/End of meeting**