Summary of working group 5 RHESSI images: next steps

Working Group 5 LS 15.03

9:00-9:30 Hurford Gordon, RHESSI imaging – past and future (invited)

9:30-9:50 Discussion on future of RHESSI imaging

9:50-10:10 Saint-Hilaire Pascal, Harmonics (invited)

10:10-10:30 Felix Simon, Image Reconstruction from Visibilities with Compressed Sensing

Working Group 5 LS 15.03

Schwartz Richard, New Developments in RHESSI Imaging

Massone Anna Maria, Multi-scale CLEAN and Pixon: an answer to 'what next in RHESSI imaging'

Piana Michele, Computational methods for the optimization of spatial and temporal resolution in RHESSI imaging

Working Group 5 SR 15.15

Discussion on way forward with RHESSI imaging (14:30-15:20)

Dickson Ewan, STIX Flight Software Simulation (15:20-15:40)

Vievering Juliane, Analysis of Microflares from the Second Flight of FOXSI (15:40-16:00)

topics	improvement	priority	Implementation by
Harmonics (Saint-Hilaire et al.)	s/c 6 & 7 replacement	1.0	October 2016
Multi-scale clean (Massone et al.)	e.g. imaging of compact footpoint and extended coronal sources	1.0	October 2016
Compressed sensing (Felix et al.)	Automatic fitting. Forward fitting of multiple sources.	1.0	February 2017
Vis PIXON (Schwartz)	Much improved speed	0.8	TBD
Sequential Monte Carlo (Piana et al.)	Probability of existence of source	0.8	TBD

Other improvements discussed with lower priorities:

- Upper limit for RMC source detection (Hurford)
- High time resolution using visibilities (Hurford)
- Improve high time resolution profiles (Hurford)
- Improving grid calibration (Dennis)
- Vis based analysis (Hurford)