

# Herschel Space Observatory Calibration Workshop: Models and Observations of astronomical calibration sources

Wednesday, December 1st

<b>Plenary session (Chair: M. Harwit)</b>
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08:30 - 08:50	<i>Registration and coffee</i>	
08:50 - 09:00	A.M. Heras/M. Kruk	Welcome
09:00 - 09:30	G.L. Pilbratt	The Herschel Space Observatory <sup>1</sup>
09:30 - 10:00	F. Helmich	HIFI - The heterodyne instrument for the infrared calibration strategy <sup>1</sup>
10:00 - 10:30	U. Klaas	PACS calibration strategy <sup>1</sup>
10:30 - 11:00	T. Lim	SPIRE calibration strategy <sup>1</sup>
11:00 - 11:15	<i>Coffee Break</i>	
11:15 - 11:50	G.S. Orton	Solar system objects as radiance calibrators in the far-infrared and submillimeter <sup>1</sup>
11:50 - 12:45	<i>Lunch</i>	
12:45 - 13:20	F. Kerschbaum	Solid state features in the far-infrared <sup>1</sup>

<b>Splinter 1: Mars and Giant Planets (Chairs: F. Helmich/C. Kramer)</b>
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13:20 - 13:45	F. Helmich/C. Kramer	Introduction <sup>2</sup>
13:45 - 14:25	E. Bergin	Observations of planets with SWAS: Calibration and science <sup>2</sup>
14:25 - 15:05	B. Butler	Mars as a Far-IR/submm calibrator? <sup>2</sup>
15:05 - 15:45	P. Hartogh	General circulation- and submm radiative transfer modeling of the Martian atmosphere at MPS <sup>2</sup>
15:45 - 16:05	<i>Coffee Break</i>	
16:05 - 16:35	J.R. Pardo	Broadband submillimetre measurements of the Giant Planets' brightness temperature <sup>2</sup>
16:35 - 17:05	M.D. Hofstadter	The observed variability of the Uranian atmosphere <sup>2</sup>
17:05 - 17:45	R. Moreno	Models of the Giant Planets <sup>2</sup>
17:45 - 18:20		General discussion
18:20	<i>End day 1</i>	
18:30	<i>Wine and cheese</i>	

<sup>1)</sup> 5 minutes discussion included

<sup>2)</sup> 10 minutes discussion included

## Thursday, December 2nd

### Splinter 2: Asteroids and satellites (Chairs: P. Hargrave/T. Lim)

09:00 - 09:15	P. Hargrave/T. Lim	Introduction
09:15 - 09:55	D. Hugues	Calibrating the long-duration balloon flight of BLAST in 2005 <sup>2</sup>
09:55 - 10:35	B. Bhattacharya	Spitzer and asteroids as calibrators <sup>2</sup>
10:35 - 10:50	<i>Coffee Break</i>	
10:50 - 11:30	T. Ootsubo	Establishment of asteroidal calibrators for far-infrared and sub-mm observations <sup>2</sup>
11:30 - 12:10	R. Moreno	Satellites as calibrators and models <sup>2</sup>
12:10 - 13:10	<i>Lunch</i>	
13:10 - 13:50	Th. Mueller	The Asteroid preparatory programme for HERSCHEL, ASTRO-F and ALMA <sup>2</sup>
13:50 - 14:35		General discussion

### Splinter 3: Stars and secondary calibrators (Chairs: J. Blommaert/M. Groenewegen)

14:35 - 14:50	J. Blommaert/M. Groenewegen	Introduction
14:50 - 15:30	M. Cohen	Stellar calibrators for HERSCHEL/SPIRE and PACS <sup>2</sup>
15:30 - 16:10	L. Decin	Modeling of stellar atmospheres in the far-infrared <sup>2</sup>
16:10 - 16:50	P. Abraham	Secondary standards for ISOPHOT <sup>2</sup>
16:50 - 17:05	<i>Coffee Break</i>	
17:05 - 17:45	G. Sandell	Secondary Calibrators at sub-mm wavelengths <sup>2</sup>
17:45 - 18:25	V. Bujarrabal	Observations and models of molecular line emission from late stars <sup>2</sup>
18:25 - 18:55		General discussion
18:55	<i>End day 2</i>	
19:30	<i>Workshop dinner</i>	

<sup>1</sup>) 5 minutes discussion included

<sup>2</sup>) 10 minutes discussion included

## Friday, December 3rd

### Plenary session (Chair: J. Cernicharo)

09:00 - 09:20	F. Helmich/C. Kramer	Conclusions of splinter 1 <sup>1</sup>
09:20 - 09:40	P. Hargrave/T. Lim	Conclusions of splinter 2 <sup>1</sup>
09:40 - 10:00	J. Blommaert/M. Groenewegen	Conclusions of splinter 3 <sup>1</sup>
10:00 - 10:35	C. Kiss	The impact of cirrus confusion noise for Herschel/PACS <sup>1</sup>
10:35 - 10:50	<i>Coffee Break</i>	

### Splinter 4: Calibration and cross-calibration strategies (Chairs: A.M. Heras/S.J. Leeks)

10:50 - 11:05	S.J. Leeks/A.M. Heras	Introduction
11:05 - 11:45	V. Tolls	SWAS Calibration Strategy <sup>2</sup>
11:45 - 12:05	P. Abraham	ISOPHOT-related calibration work at Konkoly Observatory <sup>1</sup>
12:05 - 12:45	B. Bhattacharya	Spitzer calibration strategy <sup>2</sup>
12:45 - 13:45	<i>Lunch</i>	
13:45 - 14:25	G. Sandell	Calibration strategies at JCMT <sup>2</sup>
14:25 - 15:05	I. Yamamura	Calibration plan of the ASTRO-F Mission <sup>2</sup>
15:05 - 15:45	J.M. Lamarre	Calibration of the Planck-HFI instrument: can it be used for Herschel? <sup>2</sup>
15:45 - 16:00	<i>Coffee Break</i>	
16:00 - 16:40	B. Butler	ALMA calibration strategy <sup>2</sup>
16:40 - 17:00	A.M. Heras	Herschel cross-calibration strategy
17:00 - 17:30	General discussion	

### Plenary session

17:30 - 17:50	A.M. Heras	Conclusions of splinter 4, future plans and closure
17:50	<i>End day 3</i>	

<sup>1</sup>) 5 minutes discussion included

<sup>2</sup>) 10 minutes discussion included