Thermal Emission Meeting II
ISSI, Bern, 26-28 October 2011

Wednesday 26

14:00 – 14:15: Information about ISSI (Falanga)

14:15 – 14:30: Welcome (Rickman, Davidsson)

14:30 – 14:45: Bandfield: "Lunar thermophysical investigations using LRO Diviner measurements"

14:45 – 15:00: Maria Teresa Capria: "Derivation of thermophysical properties from surface temperature data: Dawn at Vesta and Rosetta at Lutetia. Methods and problems."

15:00 – 15:15: Davidsson, Gutiérrez, Rickman: "Thermal inertia and surface roughness of Comet 9P/Tempel 1"

15:15 – 15:30: Coffee break

15:30 – 15:45: Groussin: "In-situ thermal observations of comets 103P/Hartley 2 and 9P/Tempel 1"

15:45 – 16:00: Helbert (?)

16:00 – 16:15: Thomas Mueller: "Thermophysical Modelling of Small Bodies"

16:15-16:45: Recalling the proposal – Purpose of the meeting (Rickman, Davidsson). *Reminding ourselves what we set out to do in these 2 years, particularly during the first 6 months, and presenting our rationale for the agenda of the current meeting.*

16:45-18:00: General discussion on the purpose and content of the current meeting, as well as of the Project as a whole.

Social event: Let's try the local brew in some pub

Thursday 27

09:00-10:00: General discussion on the first "main theme": Database aspects
What databases are already available (remote sensing, in situ, laboratory, modeling)? What is missing? What do we want to do? What can we do, given the timeframe and a reasonable level of work?

10:00-10:30: Database aspects: Conclusions and decisions
What do we do? Who is doing what? Action items and time schedules.

10:30-11:00: Coffee break

11:00-12:30: General discussion on laboratory work.
What laboratory measurements are requested by observers and modelers to advance the understanding of Solar System bodies? To what extent are those needs already met? What can be done at PEL to improve the situation?

12:30-14:00: Lunch

14:00-15:00: Laboratory work: Conclusions and decisions
What do we do? Who is doing what? Action items and time schedules.

15:00-15:30: General discussion on modeling work
a) Comparing models with each other: Which models and what aspects do we wish to cross-compare? For example: Different implementations of surface roughness – does it matter? 1D versus 3D heat conduction?
b) Models versus synthetic observations: For example, generate synthetic spectra for macroscopically irregular, actively CO- or N_2-sublimating TNO analogues with surface roughness, and analyze this data with standard asteroid models – does sublimation perturb estimates of size, shape, roughness, thermal inertia?

15:30-16:00: Coffee break

16:00-17:00: General discussion on modeling work, cont'd.
c) *Models versus disk-resolved observations: For example, share limited data sets (LRO lunar data? Deep Impact Tempel 1 data?) and apply various models to extract model parameters. Agreement between models? Can spectral variations for the same spot, under identical illumination conditions, but observed at different emergence angles, be reproduced and understood by models?*
d) Models versus disk-integrated observations: For example, share limited data

set (e.g., spectra versus phase angle for some well-observed asteroid) and analyze it with different models – are the same results obtained? Does disk-resolved and disk-integrated data sets yield the same results (e.g., Tempel 1 with Deep Impact versus Spitzer)?

17:00-18:00: Modeling: Conclusions and decisions
What do we do? Who is doing what? Action items and time schedules.

Social event: Classical Swiss rösti or fondue at Restaurant Brasserie Anker on Kornhausplatz 16

Friday 28

09:00-10:00: Splinter meetings
Several projects will require that two or more team members collaborate closely. The details of these collaborations (e.g., what parameter values to consider in thermophysical models) need to be agreed upon.

10:00-10:30: Splinter meetings

10:30-11:00: Coffee break

11:00-12:30: Reports from splinter meetings

12:30-14:00: Lunch

14:00-14:30: Reports from splinter meetings

14:30-15:00: Conclusions, Planning of next meeting

End of the meeting.