

# VIRTIS Science Team Meeting #6

Istituto di Astrofisica e Planetologia Spaziali – INAF

Edificio U – Room IB09

Rome 22-24 April 2013

## Meeting Agenda

<b>Monday 22<sup>th</sup> June 2013</b>			
09:30	09:50	Welcome, Logistics and agenda	
		Next meetings (Rosetta and VIRTIS), communication plans, social dinner, ...	F. Capaccioni
09:50	10:00	LESIA Contribution to VIRTIS Observations	P. Drossart
<b>Scientific Operation Planning</b>			
10:00	10:15	Status and description of the S/C planning process.	F. Capaccioni/All
10:15	10:45	VIRTIS plan for prelanding phase	G. Filacchione
10:45	11:15	VIRTIS plan for the Escort Case and Data Volume Issues (intro to afternoon splinters).	F. Capaccioni
<b>11:15</b>	<b>11:30</b>	<b>Coffee Break</b>	
<b>VIRTIS-M / VIRTIS-H simulations in support of the planning process</b>			
11:30	12:00	Nucleus spectra modeling and V-M simulator	M. Ciarniello / A. Raponi
12:00	12:30	Molecules fluorescence modeling and V-H simulator	V. Debout / C. Leyrat
12:30	13:00	IR Spectra of simple organics	B. Schmitt
<b>13:00</b>	<b>14:30</b>	<b>Lunch</b>	
14:30	14:45	Splinters meeting tasks <ul style="list-style-type: none"> <li>Verify that all the Scientific Objectives of VIRTIS are correctly addressed in the proposed observations and the scientific consistency of the overall plan.</li> <li>Verify that the forward models used are adequate to describe the expected behaviour of the comet (most of the models used shall be used to interpret the real spectra taken at the comet).</li> </ul>	F. Capaccioni/all
14:45	18:00	Splinter Sessions <ul style="list-style-type: none"> <li>VIRTIS scientific objectives and plan for DG1- Nucleus observations (room IB09) Chair Filacchione/Erard</li> <li>VIRTIS scientific objectives and plan for DG2- Coma Composition observations (room IB02) Chair Bockelee-Morvan/Capaccioni</li> </ul>	
<b>16:00</b>	<b>16:30</b>	<b>Coffee Break during the splinters</b>	
<b>Tuesday 23<sup>th</sup> April 2013</b>			
<b>VIRTIS-M / VIRTIS-H simulations in support of the planning process</b>			
09:30	10:30	Dust radiance Modelling	Fink/Rinaldi/Blecka/Tozzi
10:30	11:00	VIRTIS scientific objectives and plan for DG4- Activity Chair Capria/Leyrat	

<b>11:00</b>	<b>11:15</b>	<b>Coffee Break</b>	
11:15	13:00	VIRTIS scientific objectives and plan for DG4- Activity Chair Capria/Leyrat	
<b>13:00</b>	<b>14:30</b>	<b>Lunch</b>	
14:30	14:50	Coordinated Observations during escort phase	Capaccioni/all
14:50	15:30	Rosetta Scientific Priorities- the instruments view	Capaccioni/all
<b>Data Analysis Tools</b>			
Calibrating the data is not the end of the story. We need to determine which higher order data products have to be prepared to interpret the spectra and hyperspectral images (for instance, for the retrieval of the thermal properties of the nucleus we need the surface temperatures), and which can be provided to all the team. The interpretation and modeling work can be made considerably easier if we could identify tools that can be included in automatic pipeline which directly follows the data calibration.			
15:30	16:00	Introduction VIRTIS-M and VIRTIS-H Needs	All
16:00	16:30	Lesson Learned from Dawn/VIR	De Sanctis
16:30	18:00	Splinter Sessions V-M + V-H on data analysis tools <ul style="list-style-type: none"> <li>• Photometric Correction – Capaccioni/Ciarniello</li> <li>• Temperature evaluation – Tosi/Erard</li> <li>• Spectral Descriptors – Filacchione</li> <li>• Continuum removal V-H spectra - Bockelee-Morvan</li> <li>• ....</li> </ul>	
<b>16:00</b>	<b>16:15</b>	<b>Coffee Break during the Splinters</b>	
20:00		Dinner	
<b>Wednesday 24<sup>th</sup> April 2013</b>			
<b>In the morning splinter on dust Radiative transfer</b>			
9:30	10:00	Georeferencing of VIRTIS data – the MATISSE tool	Zinzi
		3D view of the coma	Erard
10:00	10:30	Complex Organics Spectra	Beck
10:30	11:00	UV Calibration for VIRTIS-M (application to Vex data)	Carlson
<b>11:00</b>	<b>11:30</b>	<b>Coffee Break</b>	
<b>Interpretation tools and models : Nucleus and Coma</b>			
The satisfaction of each scientific objective require the usage of the spectra or of the higher order products to derive answers to the scientific questions. Goals of this section: <ul style="list-style-type: none"> <li>• Do we have all the right modeling codes to be able to answer the VIRTIS scientific objectives?</li> <li>• Do we have all the required input (except data from the comet) to the modeling codes?</li> </ul>			
11:30	11:45	Introduction	All
11:45	13:00	What do we have Vs what is needed	Capria/Bockelee-Morvan All
<b>13:00</b>	<b>14:30</b>	<b>Lunch</b>	
14:30	15:30	What do we have Vs what is needed	Capria/Bockelee-Morvan All
15:30	16:00	AOB	All
		End of Meeting	

