

# ISSI Workshop on Comparative Aeronomy

## Scientific Program (draft 28 November 2006)

### Monday 25 June 2007

#### *Introductory session*

9:30 – 9:45	Welcome address	<b>ISSI</b>
9:45 – 10:45	Introductory talk 1: What is aeronomy?	<b>Andrew Nagy</b>
10:45 – 11:45	Introductory talk 2: Lessons learned from an integrated terrestrial atmospheric model	<b>Ray Roble</b>
11:45 – 12:45	Introductory talk 3: Recent discoveries in planetary aeronomy	<b>Tom Cravens</b>

12:45 – 14:15	Lunch Break	
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#### *Session: Fundamental processes and modelling*

14:15 – 15:05	Solar energy and photoelectron energy deposition	<b>Jane Fox</b>
15:05 – 15:55	Particle energy deposition	<b>Marina Galand</b>
15:55 – 16:15	Coffee Break	
16:15 – 17:05	Cross-sections of relevance to aeronomic studies	<b>Juliet Pickering</b>
17:05 – 17:55	Reaction rates of relevance to aeronomic studies	<b>Dave Huestis</b>

### Tuesday 26 June 2007

#### *Session: Fundamental processes and modelling (cont'd)*

9:00 – 9:50	Fluid neutral atmosphere models	<b>Steve Bougher</b>
9:50 – 10:40	Fluid ionospheric models	<b>Pierre-Louis Blelly</b>
10:40 – 11:00	Coffee Break	
11:00 – 11:50	MHD models	<b>Yingjuan Ma</b>
11:50 – 12:40	Kinetic/Hybrid models	<b>Esa Kallio</b>

12:40 – 14:15	Lunch Break	
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#### *Session: Current understanding of the aeronomy of solar system bodies*

14:15 – 15:05	Upper neutral atmospheres of Earth, Venus, and Mars	<b>Ingo Mueller-Wodarg</b>
15:05 – 15:55	Upper neutral atmospheres of the outer planets	<b>Darrell Strobel</b>
15:55 – 16:15	Coffee Break	
16:15 – 17:05	Upper neutral atmospheres of planetary satellites	<b>Hunter Waite</b>
17:05 – 17:55	Cometary atmospheres and their chemistry	<b>Jacques Crovisier</b>

## Wednesday 27 June 2007

### *Session: Current understanding of the aeronomy of solar system bodies (cont'd)*

9:00 – 9:50	Ionospheres of Venus and Mars	<b>Olivier Witasse</b>
9:50 – 10:40	Ionospheres of the outer planets and their satellites	<b>Arvidas Kliore</b>
10:40 – 11:00	Coffee Break	
11:00 – 11:50	Planetary airglow	<b>Tom Slanger</b>
11:50 – 12:40	Planetary aurora	<b>Renée Prangé</b>
12:40 – 14:15	Lunch Break	
14:15 – 19:00	Excursion	

## Thursday 28 June 2007

### *Session: Vertical coupling to above and below*

9:00 – 9:50	Solar wind interactions with Venus and Mars	<b>Tamara Breus</b>
9:50 – 10:40	Cometary ionospheres and the solar wind interactions with comets	<b>Kathrin Altwegg</b>
10:40 – 11:00	Coffee Break	
11:00 – 11:50	Magnetospheric interactions with Titan and other outer planet moons.	<b>Steve Ledvina</b>
11:50 – 12:40	Magnetosphere-ionosphere interactions at magnetized bodies	<b>Michel Blanc</b>
12:40 – 14:15	Lunch Break	
14:15 – 15:05	Dynamical coupling to the upper atmosphere	<b>Elisa Manzini</b>
15:05 – 15:55	Chemical coupling to and from the upper atmosphere	<b>Guy Brasseur</b>
15:55 – 16:15	Coffee Break	

### *Session: Escape and evolution*

17:05 – 17:55	Exospheric processes	<b>Michael Combi</b>
16:15 – 17:05	Ring/Torus aeronomy	<b>Wing Ip</b>
19:00	WS Dinner	

## Friday 29 June 2007

### *Session: Escape and evolution (cont'd)*

9:00 – 9:50	Sputtering atmospheres and exospheres on planets and satellites	<b>Robert Johnson</b>
9:50 – 10:40	Atmospheric escape processes	<b>Helmut Lammer</b>
10:40 – 11:00	Coffee Break	
11:00 – 11:50	Influence of intrinsic magnetic fields on atmospheric evolution	<b>Janet Luhmann</b>
11:50 – 12:40	Current evidence for past climate at Venus and Mars/ (What do current isotopic ratios tell us about the past history of atmospheres)	<b>Jim Kasting</b>
12:40 – 14:15	Lunch Break	
<i>Closing Session</i>		
14:15 – 15:05	Aeronomy of extrasolar planets	<b>Roger Yelle</b>
15:05 – 15:55	Future of aeronomy	<b>Michael Mendillo</b>
15:55 – 16:15	Closing remarks	<b>Andrew Nagy</b>
16:15 – 16:30	Coffee Break	