

# S.A.L.A.

## *Synchrotrons, accelerators and laboratory astrophysics*

**Wednesday 30<sup>th</sup> August -Friday 1<sup>st</sup> September 2000**

### **Provisional Programme**

(Updated 15th August 2000)

All sessions will take place in the Physics Auditorium, in the Institute of Physics and Astronomy, University of Aarhus. The conference dinner will be held at Malling Kro on Thursday 31st August. A coach has been arranged to take participants to the dinner and will leave the University at 19:00, and will stop outside the Plaza & Ritz Hotels at 19:10.

#### **Session 1: A general overview**

*Wednesday 30<sup>th</sup> August*

<b>Time</b>	<b>Title</b>	<b>Speaker</b>
11:00-12:00	Registration (in the lobby of the Institute of Physics)	
12:00-13:00	<i>Lunch (7<sup>th</sup> Floor)</i>	
13:00-14:00	REGISTRATION (cont.)	
14:00-14:15	Welcome	David Field
14:15-15:00	Observational status of atoms, molecules and ions in Space	Ewine van Dishoeck
15:00-15:45	Laboratory Astrophysics and Models: the interface between the laboratory and space	Tom Millar
15:45-16:10	<i>Coffee/Tea</i>	
16:10-17:00	Molecular Origins of Life: the interstellar-Earth connection	André Brack
17:00-18:30+	Tour of the laboratory: ASTRID/ELISA/Positrons/Crystalline ions etc.	

#### **Session 2: photophysics of atoms, small molecules and ions**

*Thursday 31<sup>st</sup> August*

<b>Time</b>	<b>Title</b>	<b>Speaker</b>
9:00-9:40	Photophysics of small molecules and ions in space	Dolores Gauyacq
9:40-10:15	Photophysics of triatomic hydrogen	Hans-Peter Helm
10:15-10:40	Acetylene in space: synchrotron radiation studies	Severine Boye
10:40-11:05	<i>Coffee/Tea</i>	
11:05-11:30	Lifetimes of excited vibrational states of $\text{H}_3^+$ .	Holger Kreckel
11:30-12:10	Photoionization of ions of astrophysical interest: theoretical survey	Kenneth Bell
12:10-12:50	Photoionization of Ions: experimental survey	Torkild Andersen
12:50-14:15	<i>Lunch</i>	

### Session 3: Molecule formation in Space: electron-ion and ion-molecule interactions

Time	Title	Speaker
14:15-14:55	The importance of electron-ion recombination: shocks, photodissociation regions and elsewhere	Evelyne Roueff
14:55-15:25	Dissociation recombination of polyatomic molecular ions	Marie J. Jensen
15:25-16:00	Dissociation dynamics and initial state dependence in electron recombination with molecular ions	Andreas Wolf
16:00-16:30	<i>Coffee/Tea</i>	
16:30-17:05	The dissociative recombination of hydrogen molecular ions	Mats Larsson
17:05-17:50	From the laboratory to comets to the origin of life	Mayo Greenberg
19:30-	<i>Conference Dinner</i> <i>(Coach departs University 19:00; Pick up Outside Plaza &amp; Ritz Hotels 19:10)</i>	

### Session 4: Solids and surfaces in Astrophysics

*Friday 1<sup>st</sup> September*

Time	Title	Speaker
9:00-9:40	Surfaces in space: an introduction	Jonathan Rawlings
9:40-10:20	Ion irradiation effects on solids of astrophysical relevance	Gianni Strazzulla
10:20-10:50	Synchrotron radiation photodesorption studies	Genevieve Comtet
10:50-11:15	<i>Coffee/Tea</i>	
11:15-11:55	Theoretical models of surface processes	Anthony Meijer
11:55-12:20	The role of accretion in the formation of doubly-deuterated interstellar molecules.	Helen Roberts
12:20-13:45	<i>Lunch</i>	

### Session 5: Large Molecules in Space and the Origin of Life

Time	Title	Speaker
13:45-14:30	Synchrotron radiation studies of ion-molecule reactions in the atmosphere of Titan	Odile Dutuit
14:30-15:10	Infrared spectroscopy on cationic PAHs using a free electron laser	Jos Oomens
15:10-15:40	Photophysics of large ring compounds	Francois Dulieu
15:40-16:05	<i>Coffee/Tea</i>	
16:05-16:30	The effect of Alfvén waves on the formation of organic molecule in dark clouds.	Andrew Markwick
16:30-17:15	Photophysics of DNA strands	Jean Cadet
17:15-17:30	Concluding Comments	