

THIRD CIRCULAR: 15th ASA Conference

(united with 16th HITRAN Conference)

University of Reims Champagne-Ardenne - FRANCE

24th – 26th August 2022, REIMS



The fifteenth Atmospheric Spectroscopy Applications (ASA) workshop will take place **24th -26th August 2022**. The ASA workshop will be held at the conference center of the Best Western *Hôtel de la Paix* located at 9 rue Buirette in Reims, France. This meeting will be coupled to the biennial HITRAN conference.

The meeting will be organized around the following topics:

- **Atmospheric measurements and observations**
- **Relevant new spectroscopic data and their analysis**
- **New trends in atmospheric spectroscopy techniques and gas analysis**
- **Status and evolution of the molecular databases**
- **Database archiving, access, and methodology**
- **Application of spectroscopy to studies of planetary atmospheres**

The meeting will also provide the opportunity to organize special sessions on satellite measurements, climatology, planetology (atmospheres of planets, exoplanets), and astrophysics (hot media such as the atmospheres of brown dwarfs, etc.). Contributions to the meeting will be selected according to their relevance to the topics aforementioned, the HITRAN database and the high-temperature compilation (HITEMP).

A registration form is also accessible on the ASA website (<https://www.univ-reims.fr/asa-hitran/>) or directly at the following link:

<https://colloques.univ-reims.fr/colloque/inscriptionEtape1.jsp?locale=en&semId=ASA-HITRAN-22> .

The registration fee **before 15th July** (320 € for permanent scientists and postdocs, 220 € for PhD students) will cover the cost of the sessions, proceedings, and refreshments. The registration also includes lunches and a banquet ticket for the participant. Accompanying persons should also register on the website (or at the following link <https://colloques.univ-reims.fr/colloque/inscriptionEtape1.jsp?locale=en&semId=ASA-ACCOMP-22>) if they want to attend the banquet (90 €).

The registration fee **after 15th July** will be 340 € for permanent scientists and postdocs, 240 € for PhD students. **The registration will be closed Tuesday 26th July 2022.**

All correspondence should be sent to the secretary of the local organizing committee: **Mme Sophie CHENAL**, tel. : +33 3 26 91 33 95, e-mail : sophie.chenal@univ-reims.fr.

List of invited speakers and the title of the presentation:

Natasha Batalha <i>University of California Santa Cruz, CA, United States</i>	Building access and community standards for opacity data at the onset of next-generation atmosphere observations
Anna Fedorova <i>IKI, Space Research Institute RAS, Moscow, Russia</i>	High-resolution infrared spectroscopy of Mars' and Venus' atmospheres: recent results and perspectives
Adam J. Fleisher <i>National Institute of Standards and Technology, Gaithersburg, United States</i>	Accurate molecular line intensities : Measurements, applications, and isotope ratios
Robert Gamache <i>Department of Environmental, Earth, and Atmospheric Sciences, University of Massachusetts Lowell, MA, US</i>	Calculating Line shape Data for Spectroscopic Databases
Marie-Aline Martin <i>Institut ISMO, Orsay, France</i>	An exotic use of the HITRAN database: Predicting laser lines for optically pumped terahertz molecular laser
Georg Mellau <i>Physikalisch-Chemisches Institut, Justus-Liebig-Universität Giessen, Germany</i>	Experimentally-accurate complete molecular line lists
Didier Mondelain <i>Laboratoire LIPhy, Grenoble, France</i>	Line shape studies of CO₂ and CH₄ transitions by CRDS for atmospheric sounding
Eli Mlawer <i>Atmospheric and Environmental Research, Lexington, MA, United States</i>	MT_CKD water vapor continuum: Recent updates and planned future development
Mitchell Spearrin <i>University of California, Los Angeles (UCLA), CA, United States</i>	Molecular line mixing effects at high temperatures and pressures: laboratory studies and sensing applications
Konstantin Vodopyanov <i>CREOL, The College of Optics & Photonics, University of Central Florida, Orlando, FL, US</i>	Broadband (3-5 μm) high-resolution (<50 kHz) molecular spectroscopy with interleaved mid-infrared dual frequency combs
Sergey Yurchenko <i>Department of Physics & Astronomy, University College London, UK</i>	ExoMol data for exoplanet and other atmospheres: progress and perspectives

Accommodations:

Participants must take care of their hotel reservations quite early since August is a highly touristic period (see e.g. www.booking.com). Some cheaper rooms are available at the CIS of Reims. They can be reserved at the following URL: <http://www.cis-reims.com/>.

Poster sessions:

The poster sessions will take place in front of the « Hôtel de la Paix » lecture hall. A vertical metallic grid (**1 m wide and 1.8 m high**) with two hooks will be available for each participant wishing to present their work. With this in mind, it will be preferable to have laminated posters with two holes at the top corners.

Program: All the abstracts from the conference are available on our website.

	Wednesday Aug. 24, 2022	Thursday Aug. 25, 2022	Friday Aug. 26, 2022
8:30 – 9:00	Welcome		
9:00 – 9:40	<i>Chairwoman</i> : J. Buldyreva 9:00 – 9:20 V. Tyuterev 9:20 – 9:40 A. Campargue	<i>Chairman</i> : V. Boudon A. J. FLEISHER	<i>Chairwoman</i> : D. Viglaska D. MONDELAIN
9:40 – 10:00	M. Birk	P. Cacciani	O. Polyansky
10:00 – 10:20	Z. Reed	P. Cermak	F. Skinner
10:20 – 10:40	J. Hayden	A. Perrin	E. Pannier
10:40 -11:00	Coffee break	Coffee break	Coffee break
11:00 –11:40	M.-A. MARTIN	E. MLAWER	R. GAMACHE
11:40 –12:00	L. Manceron	H. Fleurbaey	J. Buldyreva
12:00 –12:20	O. Ben Fathallah	P. Chelin	E. M. Adkins
12:20 –12:40	S. Kassi	C. Janssen	P. Wcislo
12:40-14:00	Lunch time	Lunch time	Lunch time
14:00 – 14:40	<i>Chairman</i> : M. Rey S. YURCHENKO	<i>Chairman</i> : D. Jacquemart A. FEDOROVA (online)	<i>Chairman</i> : V. Tyuterev K. VODOPYANOV
14:40 – 15:20	G. MELLAU	N. BATALHA (online)	M. SPEARRIN (online)
15:20 – 15:40	T. Delahaye	M. Lepère	R. Georges
15:40 – 16:00	I. Gordon	S. Perot	J. Harrison
16:00 – 16:20	R. Hargreaves	W. Fakhardji	R. Cole <i>(presented by G. Rieker)</i>
16:20 – 16:40	<i>Exhibitor – J. Schmitt</i> <i>(Bruker)</i>	<i>Exhibitor – J. Hayden</i> <i>(IRsweep)</i>	
16:40 –17:00	Coffee break	Coffee break	Coffee break
17:00 –18:30	Poster session 1	Poster session 2	
19:30		Banquet	

Exhibitors:

A special session will be dedicated to exhibitors to present the latest technological developments and applications. Bruker (<https://www.bruker.com/fr.html>) and IRsweep (<https://irsweep.com/>) have already confirmed their presence at the conference.

Local Organizing Committee:

Maud Rotger (chair)	Barbara Poty
Alexander Alijah	Laurence Régalia
Marie-Renée De Backer	Michael Rey
Alain Barbe	Vladimir Tyuterev
Sophie Chenal	Dominika Viglaska
Ludovic Daumont	Virginie Zéninari
Bruno Grouiez	

International Advisory Committee:

Iouli E. Gordon (chair)	Eli Mlawer
Peter F. Bernath	Andrei Nikitin
Manfred Birk	Valery I. Perevalov
Vincent Boudon	Maud Rotger
Alain Campargue	Laurence S. Rothman
Kelly Chance	Keith Shine
Athéna Coustenis	Jonathan Tennyson
Brian J. Drouin	Geoffrey C. Toon
Jean-Marie Flaud	Ha Tran
Robert R. Gamache	Vladimir G. Tyuterev
Joseph T. Hodges	
Christian Hill	
David Jacquemart	

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