

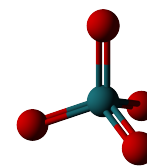
THE TWENTY-EIGHTH COLLOQUIUM ON HIGH RESOLUTION MOLECULAR SPECTROSCOPY



DIJON 2023

28 August – 1 September, 2023

<https://blog.u-bourgogne.fr/hrms2023/>



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Second Circular: April 2023

The Colloquium will be held at the "Faculté des Sciences Mirande" of the "Université de Bourgogne", 9 avenue A. Savary, DIJON – FRANCE (approximately 20 min by tramway from the train station). The local organization will be undertaken by the "Laboratoire Interdisciplinaire Carnot de Bourgogne" (ICB).

All correspondence should be sent to the secretary of the local organizing committee:

Mme Coralie FÈVRE / Mme Ibtissam EL BAKKOUCHI

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Scientific Program:

There will be **10 invited lectures** and **3 mini-symposia**. Parallel sessions will be dedicated to **54 contributed lectures given by PhD students, postdocs and young researchers**. There will be **7 poster sessions**. The covered fields are:

- High resolution rotational, vibrational, and electronic spectroscopy of molecules (radicals, ions, complexes, clusters, ...).
- Molecular dynamics.
- Theory assisting the prediction, simulation, and interpretation of spectra.
- New techniques for high-resolution spectroscopy.
- Applications to atmospheric sciences, astrophysics, planetology, combustion, gas phase biomolecules, metrology and fundamental physics, cold molecules, etc.

PLEASE READ CAREFULLY THE FOLLOWING INSTRUCTIONS BEFORE REGISTERING!

Important dates:

- Deadline for final registration and submission of abstracts: **June 15, 2023**
- Deadline for final reservation of accommodations: **June 15, 2023**
- 3rd circular with meeting information: **July 2023**

Accommodations and meals:

A limited number (114 only) of single rooms (“studettes”) are available within easy walking distance of the conference site (**36 € / night** + breakfast).

Participants who prefer to stay in **hotels** should make the reservations themselves. For this purpose, a link to the official tourism office is available on the conference's website (see below). However, these hotels may be located at some distance from the conference site (but easily accessible thanks to the tramway). Hotel reservations should be made quite early, since August is a highly touristic period.

Meals will be available at the campus restaurant (**12 € / meal**).

A **cold meal** can be bought (**22.22 €**) when registering for arrival on Sunday evening, August 27th.

Social program:

During the conference there will be an excursion combined with a banquet.

Moreover, excursions for accompanying persons will be organized.

Abstracts:

We use a modified version of the Electronic Abstract Submission (EAS) system developed at the Ohio State University.

When submitting an abstract, it is possible to ask either for a **poster presentation** or for a **contributed lecture** (15-minute talk, including questions). The Scientific Committee will decide to either accept contributed lecture proposals or to switch them into a poster presentation, depending on the number of proposals (54 slots available for contributed lecture talks); **young researchers** (PhD students and postdocs) **will be favored to give a contributed lecture**.

The abstract electronic submission system will be opened on April 15th, 2023.

The deadline for submission is June 15th, 2023.

Detailed instructions for electronic submission of abstracts will be soon available on the dedicated Web page:

<http://hrms.u-bourgogne.fr>

Please read the instructions carefully. Electronic abstract submission is a very simple process. You will only need to write a simple text (ASCII) file formatted in the correct way. Note that although the system uses LaTeX, there is no need for you to install this software on your computer.

Fees:

Conference fees are **350 €** for regular participants and **210 €** for students. This price includes congress participation, colloquium proceedings, welcome on Sunday August 27th in the evening, excursion and banquet, regional products tasting on Thursday 31st in the evening. The price for accompanying persons is **110 €**. Fees will increase in case of payment after June 1st, 2023.

Please notice that the **abstracts book** will no more be distributed for free to all participants, for clear environmental reasons. The program will be available online and a printed copy can be bought for 20 € when registering only.

Registration:

PLEASE READ VERY CAREFULLY THIS SECTION!

➤ Registration should be made **online only** at this address:

<https://blog.u-bourgogne.fr/hrms2023/boutique>

- Once going to the above address, you first need to **choose all your options**: type of registration, meals, cold meal, nights, ... It is like an online store. Please look carefully at all options, there are two pages.
- Please note, in case you stay in a campus room, that there will be no breakfast on the campus on Saturday September 2nd (room price is reduced to 28 € in this case).
- As before, there is the possibility to buy a cold evening meal for Sunday August 25th (22.22 €).
- **The “Sightseeing Tour and Banquet” option is free**, but please **do not forget to include it** to indicate your presence.
- Once these choices are made you can (recommended!) check your cart to review your choices.
- **Invited speakers should not choose rooms or meals at this stage. We will handle your accommodation and meals separately.**
- **Thus, again, please review carefully your choices before proceeding to the payment page. Your choice here is definitive. We cannot reimburse you in case of an error at this stage.**
- Then, **proceed with payment**. At this stage you will be asked for address, dates of arrival and departure, etc.
- **VERY IMPORTANT WARNING: Only credit card payment will be accepted (no cash or bank transfer payment is possible).**

Amat-Mills Prizes:

As in previous colloquia, two prizes will award the best student talk and the best student poster. Applicants should be either working for a PhD or having completed it within the last 12 months (at the time of the meeting).

The award will consist of a diploma and the recipient will receive a selection of books.

The candidates must present either a regular poster or a contributed talk at the “28th Colloquium on High Resolution Molecular Spectroscopy” on their PhD work and assume the sole responsibility for the presentation during the entire session.

Applications are limited to one per research group and must be nominated by the PhD research supervisor who will briefly give the reasons for the nomination (1/2 page). This information, together with the start and expected end dates of the PhD, and a printed copy of the abstract of the poster or talk to be selected for the competition, should be sent to the local organizer before June 1st, 2023.

The abstract itself must also be submitted as indicated above before June 1st, 2023.

Jon Hougen Travel Award:

Two PhD students will be selected by the HRMS committee to receive 500 € each to help them to participate the HRMS 2023 Conference in Dijon. Application for the award is upon abstract submission. PhD students from institutions or countries having financial restrictions are encouraged. More detail is given on the conference's website (see below).

WWW home page:

The conference has a home page on the World Wide Web to provide up-to-date information:

<https://blog.u-bourgogne.fr/hrms2023/>

Acknowledgments:

We wish to thank the following institutions for their contribution to the success of this conference: *Conseil Régional de Bourgogne Franche-Comté, CNRS, Université de Bourgogne Franche-Comté and Laboratoire Interdisciplinaire Carnot de Bourgogne.*

PRELIMINARY PROGRAM OF THE COLLOQUIUM

(Some details may still evolve)

DATES	Aug. 28, 2023	Aug. 29, 2023	Aug. 30, 2023	Aug. 31, 2023	Sept. 1, 2023
Hours	Monday	Tuesday	Wednesday	Thursday	Friday
8:30	8:30 Welcome		8:30	8:30	
9:00	Inv. Speakers A*	Contrib. Lect. E	Inv. Speakers I	Inv. Speakers K**	Poster session P
10:30	Coffee break	Coffee break	10:00 Coffee break	Coffee break	Coffee break
11:00	Poster session B	<i>Poster session</i> F	10:30 Inv. Speakers J	Contrib. Lect. L	Inv. Speakers Q
12:30 – 14:00	Lunch	Lunch	12:00 – Lunch	Lunch	Lunch
14:00	Mini. Symp. C	Mini. Symp. G	13:45	Mini. Symp. M	
16:00	Coffee break	Coffee break	Sightseeing tour	<i>Coffee break</i>	
16:30	Contrib. Lect. D	Poster session H Exhibitors' talks		Poster session N I	
19:00 – 20:00	Town Hall reception	Dinner	19:00 Banquet	Dinner	
Evening			23:00 Bus to Dijon	Poster session O <i>Regional products</i> <i>tasting***</i>	

* Including *Molecular Physics Lecture*

** Including *Amat-Mills Award* and dedication to I. M. Mills

** Free, included in registration fees

INVITED SPEAKERS

NB: Titles are still preliminary

Plenary Speakers:

- Cristina Puzzarini
(Università di Bologna, Italy)
"Astrochemical challenges: the role of rotational spectroscopy"
- Takuro Ideguchi
(University of Tokyo, Japan)
"High-speed mid-infrared spectroscopy and microscopy with high signal-to-noise ratio"
- Clément Lauzin
(Université Catholique de Louvain, Belgique)
"The challenge and the beauty of molecular complexity"
- Maria Eugenia Sanz
(King's College London, United Kingdom)
"New insights on odorants and their complexes by rotational spectroscopy"
- Jeremy Richardson
(ETH Zürich, Switzerland)
"Quantum tunnelling in molecules and clusters"
- Bryan Changala
(Harvard-Smithsonian Center for Astrophysics, USA)
"Theoretical tools for molecular discovery in the laboratory and space"
- Nasser Moazzen-Ahmadi
(University of Calgary, Canada)
"Weakly-bound clusters of atmospheric molecules: Theory and experiment"
- Irène Ventrillard
(Université Grenoble Alpes, France)
"Ultrasensitive spectroscopy: a journey with optical feedback and resonant cavities to a wide range of applications"
- Claudio Lenz Cesar
(Instituto de Física - UFRJ; ALPHA Collaboration - CERN)
"Laser spectroscopy of hydrogen and antihydrogen: towards a direct CPT test beyond 14 significant figures"
- Anne L'Huillier
(Lunds Universitet, Sweden)
"Attosecond light pulses for studying ultrafast electron dynamics"

Minisymposium I (Organizers: Stefan Willitsch, Stephan Schlemmer)

Spectroscopy of ions in traps

- Roland Wester
(Universität Innsbruck, Austria)
"Spectroscopy of cold trapped negative ions: from rotations to electronic excitations"

- Otto Dopfer (Technische Universität Berlin, Germany)
"Spectroscopy of cluster cations"
- Maximilian Beyer (Vrije Universiteit Amsterdam, Netherlands)
"Towards a hydrogen molecular ion clock"
- Philipp Schmid (Universität zu Köln, Germany)
"Leak-out spectroscopy: a new tool for high-resolution spectroscopy"

Minisymposium II (Organizers: Jean vander Auwera, Stephan Schlemmer, Harold Linnartz)

Spectroscopy in the era of JWST

- Melissa McClure (Universiteit Leiden, Netherlands)
"Tracing the chemical evolution of ices from dark clouds to exo-cometary reservoirs with JWST"
- Olivier Berné (IRAP Toulouse, France)
"First results from JWST observations of the Orion Nebula"
- Stefanie Milam (NASA Goddard Space Flight Center)
"Revealing the composition and history of the Solar System with JWST's infrared eyes"

Minisymposium III (Organizer: Paolo De Natale)

Spectroscopy for quantum technologies

- Giacomo Roati (Istituto Nazionale di Ottica, CNR-INO, Italy)
"Quantum gases in structured optical potentials"
- Silke Ospelkaus (Leibnitz Universität Hannover, Germany)
"Manipulation of heteronuclear ultracold diatomic molecules"
- Loic Anderegg (Harvard University, Cambridge MA, USA)
"Laser Cooling of Diatomic and Polyatomic Molecules"
- Michal Tomza (Uniwersytet Warszawski, Poland)
"Accurate ab initio molecular calculations for ultracold physics experiments"