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High-Resolution Submillimeter Spectroscopy of the Interstellar Medium and Star Forming Regions — From Herschel to ALMA and Beyond

Zakopane, Poland May 12–16, 2015

Dear colleagues,

We are pleased to announce a 3-day workshop on the high-resolution submilimeter spectroscopy of the interstellar medium to be held in Zakopane, Poland.

The *Herschel* Space Observatory provided extraordinary spectroscopic opportunities in the 55–670 μ m wavelength range. Unbiased spectral line surveys have been carried out in a sample of representative sources, providing a complete molecular inventory of star-forming regions. Interstellar hydrides, the basic building blocks of astrochemistry, which have their fundamental rotational transitions in the submillimeter, have been studied in absorption against bright background dust continuum sources. While the *Herschel* cryogenic mission has ended, the wealth of the data collected, in particular in the context of open time programs, is only now being explored.

The Zakopane workshop will bring together scientists involved in the *Herschel* guaranteed and open time programs do discuss the latest spectroscopic results and prospects for continuing these studies with the current ground-based an airborne facilities, specifically NOEMA, ALMA and SOFIA. Although many of the submillimeter frequencies are no longer accessible in the local Universe after the end of the Herschel mission, ALMA opens unparalleled opportunities for carrying out similar studies in high-redshift galaxies.

The program of the workshop will cover a broad range of topics based on spectroscopic results from the *Herschel* mission, as well as recent ground-based investigations. Specific topics include:

- Connections between the low-mass and high-mass star formation
- Water vapor as a tracer of star formation
- Molecular complexity and dynamics of star-forming regions
- From star formation to planets and the solar system
- Photon dominated regions and shocks as traced by large scale molecular line maps
- Diffuse ISM
- The Galactic Center environment
- Star formation in local galaxies
- Future prospects for the space and ground-based high-resolution spectroscopy

The program will be finalized by the SOC based on the titles and abstracts submitted by the participants (see below).

We are looking forward to your participation.

Maryvonne Gerin, Darek Lis & Ryszard Szczerba on behalf of the SOC and LOC <u>herschel2alma@ncac.torun.pl</u>

ORGANIZATION

The workshop is organized by the Nicolaus Copernicus Astronomical Center, with the support of the Polish-French collaborative program in astrophysics, HECOLS. This program started almost 25 years ago, under a different name, thanks to the efforts of French and Polish astronomers, in particular Alain Omont from the Institut d'Astrophysique de Paris. **The workshop will be limited to about 50 participants** and will include 30-40 invited and contributed presentations, with ample time for discussions. Poster presentations will be also possible. The workshop will start with the registration and a welcome reception in the evening of May 12 and will end after breakfast on May 16. We consider providing the dedicated bus transportation from/to Krakow.

The Scientific Organising Committe (SOC):

Ted Bergin (USA) Maryvonne Gerin (co-chair, France) Susanne Alto (Sweden) Agata Karska, (Poland) Lars Kristensen (USA) Darek Lis (co-chair, France/USA) Ryszard Szczerba (Poland)

The Local Organizing Committee (LOC):

Ryszard Szczerba Natasza Siódmiak

CONFERENCE SITE AND ACCOMMODATION

The conference will take place at the Grand Hotel ****Stamary (http://www.stamary.pl/en/core/home.php?_PageID=45148) in the beautiful mountain resort of Zakopane (see e.g.: http://www.zakopane.eu/en/ or http://www.discoverzakopane.com/) in the southern Poland. The special workshop rate for the accommodation in this nice hotel is 269 PLN for a single use room, and 339 PLN for double use. The price includes: breakfast, entrance to the Wellness & SPA: swimming pool, sauna (3 types), Jacuzzi, Kneipp path, studio cardio, billard, local tax, WiFi Internet, car park.



The reservations should be made by sending e-mail to Monika Mikulska (<u>monika.mikulska@wo-ma.com</u>) with **Herschel conference in the subject**. In case of problems/questions please contact us using dedicated official conference e-mail: <u>herschel2alma@ncac.torun.pl</u>.

At the current exchange rate, 1 EUR corresponds to approximately 4.2 PLN.

REGISTRATION

The registration fee is 100 Euro (or equivalent in USD or PLN) and should be paid at the meeting registration in cash. It includes the abstract book, welcome reception, coffee/tea/refreshments, lunches, conference dinner and transportation from/to Krakow. The registration fee for accompanying persons is 50 Euro.

In order to help with the organization, we ask the participants to submit the accompanying registration form, by **MARCH 15, 2015**. The size of the workshop is limited to 50 participants.

FINANCIAL SUPPORT

Limited financial support for organization of this workshop is provided by the Polish-French collaboration program HECOLS. The participants in need of financial assistance should submit the registration form, including justification, before March 15, 2015, Student applications should be accompanied by a letter of support from their supervisors. Please note that support for French and Polish participants is automatic (details will be provided later).

Please distribute this announcement to your colleagues

REGISTRATION FORM

"High-Resolution Submillimeter Spectroscopy of the Interstellar Medium and Star Forming Regions — From Herschel to ALMA and Beyond"

Submission deadline: March 15, 2015

Please, submit this form by email to: herschel2alma@ncac.torun.pl or szczerba@ncac.torun.pl

Full Name (Last name, First name): Affiliation: E-mail: Phone/FAX: Do you wish to present a contribution? (yes/no) If yes, (oral/poster)?

Tentative title and abstract (max. 150 words):

Additional comments (e.g. justification for the financial support request):