A: Invited Speakers

Monday, August 31, 2026, 09:00 – 10:30
Chair: Alberto Lesarri

A1 – *MOLECULAR MOVIE SPECTROSCOPY OF WEAKLY-BOUND MOLECULAR CLUSTERS*
Kenta Mizuse

A2 – *APPLICATION OF AB INITIO ANHARMONIC ALGORITHMS TO UNDERSTAND QUANTUM RESONANCE IN VIBRATIONAL SPECTRA OF HYDRATES*
Jer-Lai Kuo, Qian-Rui Huang

B: Mini Symposium: (Exo)planetary Atmospheres

Monday, August 31, 2026, 11:00 – 12:30
Chair: Vincent Boudon

B1 – *(EXO)PLANETARY ATMOSPHERES*
J. V. Seidel

B2 – *INVESTIGATING THE ROVIBRATIONAL SPECTRUM OF HOPO*
Ryan Mok, Oleksiy A. Smola, Sergey N. Yurchenko, Jonathan Tennyson

B3 – *MACHINE LEARNING FOR ISOTOPOLOGUE EXTRAPOLATION IN THE EXOMOL PROJECT*
Marco G. Barnfield, Jonathan Tennyson, and Sergey N. Yurchenko

B4 – *TEMPERATURE DEPENDENT PHOTODISSOCIATION CROSS-SECTIONS AND RATES FOR MOLECULES OF ASTROPHYSICAL INTEREST*
Ryan P. Brady, Andrei Sokolov, Charles Bowesman, Sergey N. Yurchenko, Jonathan Tennyson

B5 – *HOLLOW CATHODE SLIT JET DISCHARGE SOURCE FOR SPECTROSCOPIC STUDIES OF METAL OXIDES AND HYDRIDES.*
Ondrej Votava

C: Contributed Talks

Monday, August 31, 2026, 14:00 – 16:00

C-I (AI)

Chair: Jens-Uwe Grabow

C-I.1 – *TRACKING THE STEPWISE HYDRATION OF THE TRIFLUOROACETIC ACID DIMER WITH ROTATIONAL SPECTROSCOPY*
Megan A. Crutchfield, Farha S. Hussain, Noureddin Osseiran, Caroline S. Glick, George C. Shields, Alberto Lesarri, Amanda L. Steber, and Cristóbal Pérez

C-I.2 – *WHEN WATER MEET CRESOL: A ROTATIONAL SPECTROSCOPIC STUDY OF CRESOL ISOMERS AND THEIR MICROSOLVATION*
Agathe Maillard, Jordan A. Claus, Elias Neeman, S. Indira Murugachandran, Valerie Tsoi, Safia Hussain, Shefali Baweja, M. Eugenia Sanz, Noé Gallifa-Guynot, Isabelle Kleiner, Manuel Goubet

C-I.3 – *ALIPHATIC VERSUS AROMATIC: IODINE-CONTAINING HALOGEN-BONDED COMPLEXES CHARACTERIZED BY HIGH-RESOLUTION MICROWAVE SPECTROSCOPY*
Jannes N. Hasselhorn, Beppo Hartwig, Daniel A. Obenchain

C-I.4 – *ENHANCING THE SIGMA-HOLE: HALOGEN BONDING IN PENTAFLUOROIODOBENZENE-WATER STUDIED BY ROTATIONAL SPECTROSCOPY*
Andrea Maggio, Yue Liang, Assimo Maris, Weixing Li, Luca Evangelisti, Sonia Melandri

C-I.5 – *FROM HYDROGEN BONDING TO DISPERSION FORCES: MOLECULAR COMPLEXES OF OXAZOLE WITH* H_2O*, NE AND* CO_2 *INVESTIGATED BY ROTATIONAL SPECTROSCOPY*
J.R.Moran, C.Cabezas, D.Heras, S.De la Fuente, A.Lesarri, I.Peña

C-I.6 – *IT TAKES TWO TO TANGO: HETEROATOM EFFECTS ON THE DIMERIZATION OF BENZOXAZOLE ISOMERS PROBED BY CHIRPED-PULSE FOURIER TRANSFORM MICROWAVE SPECTROSCOPY*
Freya E. L. Berggötz, Lisa Radtke, Melanie Schnell

C-I.7 – *QUANTUM TUNNELING DYNAMICS OF WATER ON A PYRENE SURFACE*
Nuno M. Campos, Rita J. C. Roque, Megan A. Crutchfield, Noureddin Osseiran, Farha S. Hussain, Amanda L. Steber, Cristóbal Pérez, Sérgio R. Domingos

C-I.8 – *MICROSOLVATION OF WATER BY* CO_2*: THE STUDY OF WATER--*$(CO_2)_n$ *BY QUANTUM CHEMISTRY AND ROTATIONAL SPECTROSCOPY, WITH UP TO* $n = 5$
S. Collignon, A. J. Barclay, J. A. Claus, B. M. Hays, A. Pietropolli Charmet, A. R. W. McKellar, N. Moazzen-Ahmadi, C. Lauzin

C-II (AII)

Chair: Brooks H. Pate

C-II.1 – *SEQUENTIAL CAVITY-MODE AUTO-LOCK SPECTROSCOPY (SCALS) OVER HUNDRED-TERAHERTZ RANGE WITH KILOHERTZ PRECISION*
S. Vasilchenko, C.-X. Zuo, Y.-Q. Cheng, Z.-T. Zhang, W.-T. Wang, Y. R. Sun, Y. Tan, A.-W. Liu, S.-M. Hu

C-II.2 – *HIGH-EFFICIENCY LASER SPECTROSCOPY ON COLD RADIOACTIVE MOLECULES USING CONTOURED NOZZLES*
A. Claessens, R. Ferrer, Harshithbabu, W. Saelens, L. M. Arndt, Ch. E. Düllmann, F. Ivandikov, C. Murray, G. Neyens, J. Stricker, D. Renisch, P. Van den Bergh, P. Van Duppen, S. Wilkins

C-II.3 – *HIGH-PRECISION SPECTROSCOPY OF* $H_2{}^{16}O$*: IMPROVING THE SPECTROSCOPIC NETWORK THROUGH LAMB DIP AND TWO PHOTON ABSORPTION NICE-OHMS MEASUREMENTS*
A. Altman, F.M.J. Cozijn, A. Bogomolov, R. Tóbiás, A.G. Császár, and W. Ubachs

C-II.4 – *SINGLE-PHOTON DOPPLER-FREE SPECTROSCOPY IN THE VACUUM AND EXTREME ULTRAVIOLET*
M. H. Rayment, B. Rub Schlie, J. A. Agner, H. Schmutz, F. Merkt

C-II.5 – *TOWARDS HIGH RESOLUTION SPECTROSCOPY IN THE FAR-INFRARED RESTSTRAHLEN GAP USING NONLINEAR METASURFACE FOR DIFFERENCE FREQUENCY GENERATION*
A. Zarin, J. Krakofsky, N.A. Chishti, J-F Lampin, M-H Mammez, M. Rieder, M-A Martin-Drumel, M. Belkin, O. Pirali

C-II.6 – *ABSORPTION SPECTROSCOPY MEETS THE ACCURACY OF PURELY FREQUENCY-BASED DISPERSION SPECTROSCOPY*
Rajesh Chell, Marcin Gibas, Daniel Lisak, Agata Cygan

C-II.7 – *PHASE-COHERENT CP-FT THZ EMISSION SPECTROSCOPY WITH A NBN HOT ELECTRON BOLOMETER*
Roman A. Motiyenko, Eugen A. Alekseev, Sara Cibella, Guido Torrioli, Giacomo Gorla

C-II.8 – *MASER REFERENCED DISPLACEMENT SENSOR*
C. Bragard, A. Altman, A. Bogomolov, A. Goodwin-Jones and C. Lauzin

C-III (B11)

Chair: Jer-Lai Kuo

C-III.1 – *WMS-ROT: FROM QUANTUM-CHEMICAL CALCULATIONS TO ASSIGNMENT-READY ROTATIONAL SPECTRA*
Federico Lazzari

C-III.2 – *MACHINE-LEARNING CALIBRATION OF ROVIBRATIONAL ENERGY LEVELS OF CO_2 ISOTOPOLOGUES*
M. T. I. Ibrahim, D. Alatoom, N. El-Kork, S. N. Yurchenko, J. Tennyson

C-III.3 – *ACETAMIDE: A STRANGE BREW OF STRUCTURE, SPECTROSCOPY AND THEORY*
Terri E. Field-Theodore, Nicolò Quaresima, and Peter R. Taylor

C-III.4 – *NEW 4TH ORDER PARAMETER DEFINITIONS AND BRUTE FORCE APPROACH TO THE CONTACT TRANSFORMATION FOR THE $\mathbf{G}_6$ TORSION-ROTATION PROBLEM*
J.H. Westerfield, Helgi Rafn Hrodmarsson, Eléonore Antonelli, Mike Buttkus-Barth, Ha Vinh Lam Nguyen

C-III.5 – *HIGH-TEMPERATURE RAMAN SPECTRA OF CO_2 ISOTOPOLOGUES: MODELING WITH AN INTERACTING ANHARMONIC OSCILLATOR APPROACH*
Eduardo Suárez, Christian Ostertag-Henning, Miguel Carvajal, Renato Lemus

C-III.6 – *AB INITIO COLLISION-INDUCED LINE SHAPE PARAMETERS FOR AIR-PERTURBED R(0) 0-0 LINE IN HF*
Maksim Rachko, Jakub Behrendt, Hubert Józwiak, Artur Olejnik, Richard Dawes, Ernesto Quintas Sánchez, and Piotr Wcisło

C-III.7 – *RECENT ADVANCES IN HIGH-RESOLUTION SPECTROSCOPY OF ASTROPHYSICALLY IMPORTANT DIATOMIC MOLECULES*
N. El-Kork, S. N. Yurchenko, J. Tennyson, and collaborators

C-III.8 – *VIBRATIONAL-ROTATIONAL SPECTROSCOPIC CHARACTERIZATION OF THE INTERSTELLAR COMPLEX ORGANIC MOLECULE METHYL ACETATE*
Rossella Di Giovanni, Andrea Pietropolli Charmet, Paolo Stoppa, Nicola Tasinato

D: Posters

Monday, August 31, 2026, 16:30 – 18:00

D1 – *FUNDAMENTAL INVARIANT NEURAL NETWORKS APPLIED TO THE SPECTROSCOPY OF PROTONATED ACETYLENE*
L. H. Coudert

D2 – *THE ELECTRON SPIN-ROTATION-TORSION HAMILTONIAN ACCOUNTING FOR DISTORTION EFFECTS*
L. H. Coudert, R. Chahbazian, O. Pirali, M.-A. Martin-Drumel, L. Margulès, R. A. Motiyenko, and L. Zou

D3 – *PRECISION SPECTROSCOPY FOR MEDICINE: PERSPECTIVES OF INTEGRATING BREATH-RELEVANT MOLECULES INTO HITRAN*
Frances M. Gomez, Robert J. Hargreaves, Iouli E. Gordon

D4 – *EXPLORING THE CHIRALITY OF FLEXIBLE MOLECULES USING ROTATIONAL SPECTROSCOPY*
Wenhao Sun, Melanie Schnell

D5 – *GROUND-STATE ENERGY LEVELS OF METHANE WITH kHz–LEVEL ACCURACY FROM COMB-REFERENCED DOUBLE-RESONANCE AND LAMB-DIP SPECTROSCOPIES*
Vinicius Silva de Oliveira, Isak Silander, Hiroyuki Sasada, Sho Okubo, Hajime Inaba, Kevin K. Lehmann, Aleksandra Foltynowicz

D6 – *OPTICAL FREQUENCY COMB FOURIER TRANSFORM SPECTROSCOPY OF DIBROMOMETHANE IN THE 8 μm REGION*
Ibrahim Sadiek, Aleksandr A. Balashov, Adrian Hjältén, Michael Rey, Oleg Egorov, Aleksandra Foltynowicz

D7 – *TENTATIVE DETECTION OF SD^+ IN THE ORION BAR*
Mitsunori Araki, Valerio Lattanzi, Christian P. Endres, and Paola Caselli

D8 – *BRIDGING THE METROLOGICAL GAP BETWEEN SPECTROSCOPIC LINE PARAMETERS AND SPECIES CONCENTRATIONS RETRIEVED BY GAS ANALYZERS.*
Victor Gorshelev, Gourab Dutta-Banik, Andrea Pogany, Javis Nwaboh

D9 – *JET-COOLED ROTATIONAL SPECTROSCOPY OF ETHYL LACTATE: CONFORMATIONAL LANDSCAPES AND CONVERSIONS*
R. Hamidi Mejlej, A. Insausti, J. Ma, W. Jäger, and Y. Xu

D10 – *GENERAL FITTING CODE: MAIN FEATURES AND APPLICATIONS*
Karel Vávra, Kateřina Luková

D11 – *LABORATORY MILLIMETER- AND SUBMILLIMETER-WAVE SPECTROSCOPY OF THIOACETONE, FROM 150 TO 500 GHz FOR HOT-CORE SEARCHES*
Noé Gallifa-Guynot, Miguel Sanz-Novo, Víctor M. Rivilla, J.-C. Guillemin, Roman Motiyenko, and Laurent Margulès

D12 – *QUANTUM CHEMISTRY CALCULATIONS OF EXCITED STATES OF CHIRAL DIMERS : A FIRST STEP TOWARDS TIME-RESOLVED CHIRAL RECOGNITION*
Clément Guiot du Doignon, José Luis Pascual, Ismanuel Rabadán, Bernard Pons

D13 – *STEPWISE HYDRATION SWITCHES ELECTRONIC STRUCTURE IN A BIFUNCTIONAL ORGANOCATALYST THROUGH DOUBLE HYDROGEN BONDING*
Xiaolong Yi, Yongtao Wang, Haoran Li

D14 – *HIGH-ACCURACY SPECTROSCOPY OF THE OXYGEN B BAND FOR ATMOSPHERIC REMOTE SENSING AND HITRAN2024*
K. Bielska, S. Wójtewicz, J. Domysławska, R. Ciuryło, D. Lisak

D15 – *HIGH-ACCURACY HD LINE-SHAPE ANALYSIS WITH HETERODYNE CAVITY RING-DOWN SPECTROSCOPY*
Agata Cygan, Rajesh Chell, Szymon Wójtewicz, Hubert Jóźwiak, Grzegorz Kowzan, Nikodem Stolarczyk, Katarzyna Bielska, Piotr Wcisło, Roman Ciuryło, Daniel Lisak

D16 – *SUB-DOPPLER SPECTROSCOPY OF METHANE IN THE THz RANGE*
Anđela Zarin, Luan Juppet, Naveed Ahmed Chishti, Olivier Pirali

D17 – *FIRST SPECTROSCOPIC STUDY OF A NEW INTERSTELLAR TARGET: ACETADIMINE (*$HN{=}C(Me)NH_2$*)*
Laurent Margulès, Noé Gallifa-Guynot, Roman A. Motiyenko, Jean-Claude Guillemin

D18 – *RECENT DEVELOPMENTS OF THE LILLE ICE TERAHERTZ EXPERIMENT: IMPROVED SENSITIVITY AND APPLICATIONS TO PROCESSED ASTROPHYSICAL ICES*
Mariia Aliekseieva, Roman A. Motiyenko, Emmanuel Dartois

D19 – *OBSERVATION AND DEPERTURBATION OF HIGHLY EXCITED STATES IS RBCS. EVIDENCE OF NON-ADIABATIC COUPLING*
W. Jastrzebski, J. Szczepkowski, A. Pashov, P. Kowalczyk

D20 – *ROTATIONAL SPECTROSCOPIC STUDIES OF AN ODOROUS CHIRAL TAUTOMERIC FURANONE: 4-HYDROXY-2,5-DIMETHYL-3(2H)-FURANONE AND ITS HYDRATES*
Jiayi Li, Wenhao Sun, Liuting Wang, Melanie Schnell

D21 – *CASDA24: CALCULATED DATABASES FOR MOLECULAR SPECTROSCOPY*
V. Boudon, C. Richard, O. Ben Fathallah, P. Hardy, R. Kamel, M. Rotger

D22 – *TOWARDS UNDERSTANDING LEAK-OUT SPECTROSCOPY (LOS) IN CRYOGENIC ION TRAPS*
J. Böing, P. Schlemmer, E. Plaar, A. Sich, S. Schlemmer

D23 – *NEW EXPERIMENTAL SPECTRA AND QUANTITATIVE MODELING OF THE STRETCHING DYAD OF SILANE AND OVERTONES*
Raef Kamel, Vincent Boudon, Cyril Richard, Fridolin Kwabia Tchana, and Laurent Bruel

D24 – *RO-VIBRATIONAL SPECTROSCOPY OF THE ALLENE CATION ($C_3H_4^+$)*
Wenqin Li, Samuel J. P. Marlton, Meng Li, and Stephan Schlemmer

D25 – *HIGH-RESOLUTION LEAK OUT SPECTROSCOPY OF THE ETHYLENE CATION*
Meng Li, Samuel J. P. Marlton, Wenqin Li, Stephan Schlemmer

D26 – *HYPERFINE-RESOLVED VARIATIONAL NUCLEAR MOTION SPECTRA OF DIATOMIC MOLECULES*
Yide Yin, Sergey N. Yurchenko, and Jonathan Tennyson

D27 – *THE ROTATIONAL SPECTRUM OF TRANS-2,3-EPOXYBUTANE: A COMBINED CHIRPED-PULSE FOURIER TRANSFORM AND ABSORPTION MICROWAVE STUDY*
Chenxu Wang, Rosemonde Chahbazian, Prachi Misra, Holger S. P. Müller, and Stephan Schlemmer

D28 – *EXOMOL LINE LIST FOR LOW-LYING ELECTRONIC BAND SYSTEMS OF $^{12}C^{16}O$*
Chenyi Tao, Jonathan Tennyson, Sergei N. Yurchenko and Nayla El-Kork

D29 – *REANALYSIS OF THE $B^2\Sigma^+$ - $X^2\Sigma^+$ SYSTEM OF $^{12}C^{17}O^+$ BY FT - UV EMISSION SPECTROSCOPY: $B^2\Sigma^+(\nu = 0, 1)$ LEVEL*
K. Jachymek, W. Szajna, R. Hakalla, S.Ryzner, A. Stasik, I. Piotrowska, M. I. Malicka, R. W. Field

D30 – *EXTENSION OF 2-ETHOXYETHANOL ROTATIONAL SPECTROSCOPY AND ITS SEARCH IN ISM*
Agathe Maillard, D. Archie Stewart, Manuel Goubet, Elias M. Neeman, Brett A. McGuire

D31 – *MODERN DFT SCALING FOR NUCLEAR QUADRUPOLE COUPLING CONSTANTS: QMBENCH.NET/NQCC/PARAMETRIZATION*
Jannes N. Hasselhorn, Beppo Hartwig, Daniel A. Obenchain

D32 – *HIGH RESOLUTION SPECTROSCOPY OF EXOPLANET BIOSIGNATURES WITH LARGE AMPLITUDE MOTIONS*
T. K. L. Do, T. R. Huet, P. Asselin, Y. Berger, A. Rizopoulos, J. Vander Auwera, A. Maillard, M. Goubet, L. Zou, A. Cuisset, A. Roucou, R. George, A. Voute, H. V. L. Nguyen, and I. Kleiner

D33 – *THE $^{13}C^{18}O$ $A^1\Pi(v = 2) \sim A^3\Pi(v = 13)$ INDIRECT PERTURBATION: DETECTION, MECHANISM AND SURPRISES*
S. Ryzner, R. W. Field, W. Ubachs, A. Pashov, P. Jasik, J. E. Sienkiewicz, N. de Oliveira, K. F. Lai, M. I. Malicka, A. Stasik, K. Jachymek, P. Kolek, R. Kępa W. Szajna, I. Piotrowska, A. Para, A. N. Heays, and R. Hakalla

D34 – *HIGH-RESOLUTION SPECTROSCOPY OF $HCOOCH_3$, SKELETAL TORSION*
Ryoma Kakuda, Kaori Kobayashi, Masaharu Fujitake, Dennis W. Tokaryk, Brant E. Billinghurst

D35 – *VACUUM COMPATIBLE PIEZO-ACTUATED MIRROR MOUNT WITH 80 KHZ BANDWIDTH*
C. Bragard, A. Libert, A. Lorvelec, A. Bogomolov, A. Goodwin-Jones, and C. Lauzin

D36 – *STUDY OF PREDISSOCIATIVE LIFETIMES OF CS^{2+} DICATION*
Lukáš Hrubčík, Tereza Uhlíková

D37 – *CROSS-ISOTOPOLOGUE VALIDATION OF A RESIDUAL LIGHTGBM MODEL FOR CO_2 ENERGY CALIBRATION*
Mohammad Taha I. Ibrahim, Dunia Alatoom, Nayla El-Kork, Sergey N. Yurchenko, Jonathan Tennyson

E: Invited Speakers

Tuesday, September 01, 2026, 09:00 – 10:30
Chair: Oskar Asvany

E1 – *BROADBAND VIBRATIONAL SPECTROSCOPY OF MOLECULAR IONS: FROM ASTROCHEMICAL FINGERPRINTS TO REACTION MECHANISMS*
Sandra Brünken

E2 – *THE SPACE AS A SPECTROSCOPIC LABORATORY: A NEW VIEW OF THE CHEMICAL COMPLEXITY IN THE UNIVERSE WITH THE QUIJOTE LINE SURVEY*
José Cernicharo

F: Contributed Talks

Tuesday, September 01, 2026, 11:00 – 12:30

F-I (AI)

Chair: Marie-Aline Martin-Drumel

F-I.1 – *DISSECTING INFRARED SIGNATURES IN INTERSTELLAR ICES BY INTEGRATED MATRIX-ISOLATION SPECTROSCOPY AND ANHARMONIC CALCULATIONS*
Malgorzata Biczysko, Justyna Krupa

F-I.2 – *HIGH-POWER LASER-PLASMA CHEMISTRY OF METHANOL VAPOR AND ITS DEUTERATED ISOTOPOLOGUES: SPECTROSCOPIC APPROACH*
Veronika Horká-Zelenková, Josef Krása, Martina Toufarova, Jakub Cikhardt, Vojtěch Scheinpflug, Pooja Devi, Shubham Agarwal, Norbert Kanaloš, Roman Dudžák, Tomáš Burian, Michal Krupka, Sushil Singh, Libor Juha

F-I.3 – *ANALYSIS OF THE HIGH RESOLUTION INFRARED SPECTRUM OF MONODEUTERO-OXIRANE IN THE 700–1000 CM^{-1} REGION*
Karen Keppler, Alexandra Brandenberger, Michele Perrino, Jürgen Stohner, Ziqiu Chen, Sieghard Albert, Gunther Wichmann, Martin Quack

F-I.4 – *VIBRATIONAL STARK EFFECT FOR PROBING LOCAL ELECTRIC FIELDS USING LASER SPECTROSCOPY*
Fernando Torres-Hernández, Satchin Soorkia, Michel Broquier, Gilles Grégoire, Eric Gloaguen

F-I.5 – *OPTICAL FREQUENCY COMB FOURIER TRANSFORM SPECTROSCOPY IN THE 8 μm REGION AND EFFECTIVE HAMILTONIAN LINE LIST OF FORMALDEHYDE*
Aleksandr A. Balashov, Michael Rey, Adrian Hjältén, Aleksandra Foltynowicz

F-I.6 – *DUAL-FREQUENCY-COMB SPECTROSCOPY FROM THE TERAHERTZ TO THE VACUUM ULTRAVIOLET*
Konstantin Vodopyanov, Dmitrii Konnov, Andrey Muraviev

F-II (AII)

Chair: Isabelle Kleiner

F-II.1 – *ROTATIONAL SPECTROSCOPY OF C-DEUTERATED AMINOACETONITRILE AND REFINEMENT OF ITS SEMI-EXPERIMENTAL EQUILIBRIUM STRUCTURE*
Michela Nonne, Mattia Melosso, Luca Bizzocchi, Gabriele Panizzi, Silvia Alessandrini, Cristina Puzzarini

F-II.2 – *CONFORMATIONS OF THE MACROCYCLIC LACTONE HABANOLIDE: INFLUENCE OF THE DOUBLE BOND REVEALED BY ROTATIONAL SPECTROSCOPY*
Charlotte N. Cummings, Gulnoor Anwar, and M. Eugenia Sanz

F-II.3 – *LARGE AMPLITUDE MOTIONS REVEALED BY FOURIER-TRANSFORM MICROWAVE SPECTROSCOPY IN A POTENT ALKYLATING AGENT: METHYL METHANESULFONATE*
Quentin Messaoudi, Sven Herbers, Beppo Hartwig, Kenneth Koziol, Ghita Oubouali, Guillaume Dhont, Ha Vinh Lam Nguyen, Luyao Zou

F-II.4 – *UNEXPECTEDLY LOW METHYL TORSIONAL BARRIERS IN THE MICROWAVE SPECTRUM OF 3-METHYL-2-THIOPHENECARBOXALDEHYDE RESOLVED AFTER A LONG-STANDING SPECTRAL ASSIGNMENT*
M. Buttkus-Barth, C. Dindić, J. H. Westerfield, H. V. L. Nguyen

F-II.5 – *THREE METHYL INTERNAL ROTORS OF 3-ACETYL-2,5-DIMETHYLTHIOPHENE INVESTIGATED BY MICROWAVE SPECTROSCOPY AND QUANTUM CHEMICAL CALCULATIONS*
E. Antonelli, C. Dindic, H.V.L. Nguyen

F-II.6 – *SLIPPERY HANDSHAKES: MICROHYDRATION-DRIVEN EFFECTS IN ENANTIOSPECIFIC INTERACTIONS CAPTURED IN GAS-PHASE CLUSTERS*
Rita J. C. Roque, Maria P. R. C. Marques, Nuno M. Campos, Sérgio R. Domingos

F-III (B11)

Chair: Wybren Jan Buma

F-III.1 – *PERTURBATION OF CO* $A^1\Pi$ *BY* $a^3\Pi$ *SHOULD HAVE BEEN UNDETECTABLE: DETECTION, MECHANISM, AND SURPRISES*
S. Ryzner, R. W. Field, W. Ubachs, A. N. Heays, A. Pashov, P. Jasik, J. E. Sienkiewicz, N. de Oliveira, K. F. Lai, M. I. Malicka, A. Stasik, W. Szajna, I. Piotrowska, and R. Hakalla

F-III.2 – *THE SPECTRUM OF* CrD *NEAR 800* **nm** *RECORDED IN CAVITY-ENHANCED ABSORPTION*
Jérôme Morville, Lucas K. A. Michaud--Chevalier, Amanda J. Ross

F-III.3 – *EXTENSIONS OF ASSIGNMENTS IN THE* $F\,^4\Delta$-$X\,^4\Delta$ *SPECTRUM OF FeH: LOW-J LINES AND NEW VIBRATIONAL LEVELS*
L. K. A. Michaud--Chevalier, T. E. Blackmore, D. W. Tokaryk, A. G. Adam, J. Morville, P. Crozet, A. J. Ross

F-III.4 – *COMPETITION BETWEEN PHOTOIONIZATION AND PREDISSOCIATION IN ELECTRONICALLY EXCITED STATES OF* He_2 *STUDIED BY SIMULTANEOUS DETECTION OF METASTABLE* He *FRAGMENTS AND* He_2^+ *IONS.*
M. Holdener, J. Agner, H. Schmutz, F. Merkt

F-III.5 – *DISENTANGLING FRANCK--CONDON AND HERZBERG--TELLER ACTIVITY IN THE* $S_1 \leftarrow S_0$ *SPECTRUM OF JET-COOLED STYRENE OXIDE: A COMBINED HIGH-RESOLUTION REMPI AND TDDFT STUDY*
J. Jakob, M. Gerlach, V. Grigorian, P. Ferrari, T. F. Giesen, G. W. Fuchs

F-III.6 – *FIRST ELECTRONIC SPECTRA OF VANADIUM HYDRIDE AND DEUTERIDE (VH/VD)*
Thomas D. Varberg

G: Contributed Talks

Tuesday, September 01, 2026, 14:00 – 16:00

G-I (AI)

Chair: Sandra Brünken

G-I.1 – *MILLIMETER-WAVE SPECTROSCOPY OF CORIOLIS-COUPLED MERCAPTOACETALDEHYDE ($HCOCH_2SH$)*
Hayley A. Bunn, Brian J. Esselman, Zhenru Dong, Silvia Spezzano, Paola Caselli

G-I.2 – *DETECTION OF S-BEARING SIX-MEMBERED RING IN THE LABORATORY AND IN SPACE*
Mitsunori Araki, Miguel Sanz-Novo, Christian P. Endres, Paola Caselli, Víctor M. Rivilla, Izaskun Jiménez-Serra, Laura Colzi, Shaoshan Zeng, Andrés Megías, Álvaro López-Gallifa, Antonio Martínez-Henares, David San Andrés, Sergio Martín, Miguel A. Requena-Torres, Juan García de la Concepción, Valerio Lattanzi

G-I.3 – *MILLIMETER-WAVE ROTATIONAL SPECTROSCOPY OF THIOPHENOL FOR ASTROCHEMISTRY*
Zhenru Dong, Christian P. Endres, Mitsunori Araki, Paola Caselli, Valerio Lattanzi

G-I.4 – *ROTATIONAL SPECTRUM AND STRUCTURAL ANALYSIS OF 5-NORBORNENE-2-CARBONITRILE: A BROADBAND MICROWAVE AND MILLIMETER-WAVE MICROWAVE STUDY*
Domingo Heras, Carlos Cabezas, Isabel Peña, Celina Bermúdez, Alberto Lesarri

G-I.5 – *ROTATIONAL SPECTROSCOPY OF CYANOCYCLOPENTADIENE ISOMERS AND DIAZOCYCLOPENTADIENE FOR ASTRONOMICAL SEARCH IN HOT INTERSTELLAR MEDIUM*
Noé Gallifa-Guynot, Karina Sogomonyan, Brett A. McGuire, Jerôme Loreau, Roman Motiyenko, J.-C. Guillemin, and Laurent Margulès

G-I.6 – *INVESTIGATING THE PRESENCE OF LARGER CYANO-DERIVATIVE PAHS IN THE INTERSTELLAR MEDIUM*
Carlos Limeres Vazquez, Megan A. Crutchfield, Carlos Cabezas, Pablo Jurado, Farha S. Hussain, José R. Morán, Isabel Peña, Alberto Lesarri, Celedonio M Alvarez, Dolores Pérez, José Cernicharo, Cristóbal Pérez, Amanda L. Steber

G-I.7 – *FLASH VACUUM PYROLYSIS OF 1-METHYLCYCLOBUTANOL: INSIGHTS FROM ROTATIONAL SPECTROSCOPY*
Lucie Kolesniková, Karel Vávra, Marie Kříž, Jan Svoboda, Patrik Kania, Štěpán Urban, Jean-Claude Guillemin

G-I.8 – *ROTATIONAL STUDY OF 1-AMINO-2-PROPANOL AND ITS VIBRATIONAL SATELLITES*
P. Misra, M. Fatima, T. Gaßen, and S. Schlemmer

G-II (AII)

Chair: Sonia Melandri

G-II.1 – *CHAINING 4H-PYRAN-4-ONE: CONCERTED WATER DYNAMICS IN A PLANAR AROMATIC MOLECULE*
Rita J.C. Roque, Nuno M. Campos, Donatella Loru, Eva Gougoula, Melanie Schnell, Sérgio R. Domingos

G-II.2 – *NON-LINEAR BIFURCATED HYDROGEN BONDS IN A PROTON SPONGE–FORMIC ACID COMPLEX REVEALED BY ROTATIONAL SPECTROSCOPY*
Ningjing Jiang, Melanie Schnell

G-II.3 – *FROM TRIMER TO PENTAMER: STRUCTURAL MOTIFS AND INTERACTIONS IN SO_2 AGGREGATES*
Satnam S. Dole, Chris Medcraft, S. Indira Murugachandran, M. Eugenia Sanz

G-II.4 – *REVEALING THE STRUCTURE AND INTERMOLECULAR INTERACTIONS OF 2-MERCAPTOETHANOL DIMERS BY BROADBAND ROTATIONAL SPECTROSCOPY*
Farha S. Hussain, Noureddin Osseiran, Amanda L. Steber, and Cristóbal Pérez

G-II.5 – *UNVEILING THE UNDERAPPRECIATED: THE BONDING FEATURES OF C–H · · · S–S INTERACTIONS OBSERVED FROM ROTATIONAL SPECTROSCOPY*
Wenqi Lv, Yugao Xu, Tingting Yang, Liuting Wang, Jinxi Huang, Haiying Huang, Gang Feng, Jens-Uwe Grabow

G-II.6 – *WATER- AND FORMIC ACID-ASSISTED CLAISEN REARRANGEMENTS PROBED BY ROTATIONAL SPECTROSCOPY*
Xiujuan Wang, Jiayi Li, Melanie Schnell, Jens-Uwe Grabow

G-II.7 – *HIGH-RESOLUTION ROTATIONAL SPECTROSCOPY OF $(OCS)_n$--$(H_2O)_m$ CLUSTERS*
Z. Wang, D. Yélamos, C. Calabrese, C. Bermúdez, A. Lesarri

G-II.8 – *DISENTANGLING HYDROGEN VS. CHALCOGEN BONDING IN* $(HCl)_2 - H_2S$ *AND* $HCl - H_2O - H_2S$ *TRIMERS VIA BROADBAND ROTATIONAL SPECTROSCOPY*
Megan A. Crutchfield, Noureddin Osseiran, Zbigniew Kisiel, Alberto Lesarri, Amanda L. Steber, Cristóbal Pérez

G-III (B11)

Chair: Dennis Tokaryk

G-III.1 – *SPECTROSCOPY OF MOLECULES, RADICALS, AGGREGATES BASED ON SILICON AND HYDROGEN*
Raef Kamel, Vincent Boudon, Cyril Richard, Fridolin Kwabia Tchana, and Laurent Bruel

G-III.2 – *INFRARED SPECTROSCOPY OF ACETALDEHYDE IN SUPERFLUID HELIUM NANODROPLETS IN THE 3-MICRON REGION*
R. Hamidi Mejlej, S. Parshotam, S.E. Beresnak, P. Raston, Q.R. Huang, J.L. Kuo, W. Jäger, and Y. Xu

G-III.3 – *LINE INTENSITIES AND SELF-BROADENING COEFFICIENTS FOR THE ν_{14} BAND OF PYRROLE NEAR 14 μm*
Carla Silva Tafur, Jean Vander Auwera

G-III.4 – *NEW SPECTROSCOPIC LINE PARAMETERS OF H2O IN THE FAR-INFRARED REGION FOR ESA'S FORUM MISSION*
Daniel Coxon, Jeremy Harrison, D. Chris Benner, Malathy Devi, Dominique Appadoo, Alexandre Voute, Brant Billinghurst, Jianbao Zhao, Alain Campargue

G-III.5 – *INVESTIGATION OF DARK-STATE PERTURBATIONS IN THE ν_{17} METHYL ROCKING BAND OF PROPYLENE OXIDE BY THE $2\nu_{22} + \nu_{24}$ AND $\nu_{20} + \nu_{24}$ COMBINATION BANDS*
B. Asadpour, T. F. Giesen, E. Döring, J. Jakob, K. Luková, K. Vávra, G. W. Fuchs

G-III.6 – *SPECTROSCOPIC LINE PARAMETERS OF CARBON DIOXIDE IN THE 500–850 CM^{-1} REGION*
Jeremy J. Harrison, Daniel J.L. Coxon, D. Chris Benner, Malathy Devi, Brant E. Billinghurst, Jianbao Zhao

G-III.7 – *INSIGHTS INTO THE* $HNCO\cdots H_2O_2$ *COMPLEXES BY MATRIX ISOLATION INFRARED SPECTROSCOPY AND QUANTUM CHEMICAL CALCULATIONS*
L. Uribe, J. Krupa, M. Biczysko, and N. Tasinato

G-III.8 – *HIGH RESOLUTION INFRARED, MICROWAVE AND MILLIMETER-WAVE SPECTROSCOPIES ON DIOXANE ISOMERS*
Pierre Asselin, Alaa Houwayji, Manuel Goubet, Robert Georges, Anthony Roucou, Colwyn Bracquart, Olivier Pirali, Arnaud Cuisset

H: Posters

Tuesday, September 01, 2026, 16:30 – 18:00

H1 – *TRIPLE-RESONANCE SPECTROSCOPY USING A FREQUENCY COMB PROBE FOR HIGH-PRECISION MEASUREMENTS OF METHANE IN THE 12,000 cm^{-1} REGION*
Qinxue Nie, Vinicius Silva de Oliveira, Adrian Hjältén, Isak Silander, Kevin K. Lehmann, Aleksandra Foltynowicz

H2 – *VUV-FT SPECTROSCOPY OF THE CAMERON SYSTEM* ($a^3\Pi$-$X^1\Sigma^+$) *AND DEPERTURBATION ANALYSIS OF THE* $a^3\Pi$ *($\nu = 4$) STATE OF* $^{12}C^{16}O$
A. Stasik, R. W. Field, W. Ubachs, N. de Oliveira, S. Ryzner, M. I. Malicka, I. Piotrowska, K. Jachymek, A. Heays, W. Szajna, R. Hakalla

H3 – *COLLISIONAL LINE BROADENINGS AND SHIFTS IN THE S(0), S(1) AND S(2) ROTATIONAL RAMAN LINES OF HD IN AN H_2 BATH: EXPERIMENTAL MEASUREMENTS AND THEORETICAL CALCULATIONS*
R. Z. Martínez, L. Shirkov, H. Jóźwiak, P. Wcisło

H4 – *ROVIBRATIONAL SPECTROSCOPY OF $HNCO^+$: A POTENTIAL PRECURSOR OF HNCO IN SPACE*
Marius Gerlach, Samuel Marlton, Philipp Schmid, Jens van der Hulst, Sandra Brünken, Oskar Asvany, Stephan Schlemmer

H5 – *AN IMPROVED STUDY OF CYANOACETYLENE AND DIACETYLENE INCLUDING THE STRONG $2\nu_5$ BAND OF* HC_3N *AND ν_4 BAND OF* HC_4H
Mattia Melosso, Luca Bizzocchi, Filippo Tamassia, Martina Taddia, Francesca Tonolo, Silvia Alessandrini, Gabriele Panizzi, Michela Nonne, Marie-Aline Martin-Drumel, Olivier Pirali, Luca Dore, Iouli E. Gordon, Cristina Puzzarini

H6 – *GLOBAL ANALYSIS OF METHYL INTERNAL ROTATION AND EXACT NUCLEAR QUADRUPOLE COUPLING IN 2-CHLOROPROPENE*
E. Antonelli, J. Lhermenault, M.A. Pham, H.V.L. Nguyen

H7 – *HIGH-RESOLUTION STUDY OF THE ν_{10} AND ν_9 BANDS OF ALLENE AROUND 11 μM*
Solène Perot, Athéna Rizopoulos, Jean Vander Auwera

H8 – *HIGH-RESOLUTION SPECTROSCOPY AND MULTICHANNEL QUANTUM-DEFECT-THEORY ANALYSIS OF HIGH S AND D RYDBERG SERIES OF YTTERBIUM*
E. N. Toutoudaki, F. Merkt

H9 – *INFRARED SIGNATURES OF REFRACTORY MOLECULES: FROM LABORATORY SPECTROSCOPY TO MIRA STARS*
Eileen Döring, Thomas F. Giesen, Guido W. Fuchs

H10 – *FREQUENCY-MODULATED 200 GHz ROTATIONAL SPECTROSCOPY OF STYRENE OXIDE*
Caroline Maria Sunny, Jonas Bosmann, Guido W. Fuchs, Thomas F. Giesen

H11 – *ROTATIONAL SPECTRA OF FOUR CONFORMERS OF ALLYLAMINE*
Kateřina Luková, Bao Ngoc Dangová, Lukáš Hrubčík, Tereza Uhlíková, Jan Koucký, Patrik Kania, Štěpán Urban, Lucie Kolesniková

H12 – *TEMPERATURE-DEPENDENT PHOTODISSOCIATION CROSS SECTIONS AND RATES FOR NH AND H_2S*
Armando N. Perri, Tereza Uhlíková, Gap-Sue Kim, Alexander O. Mitrushchenkov, Sergey N. Yurchenko, and Jonathan Tennyson

H13 – *ROVIBRATIONAL POPULATION REDISTRIBUTION IN JET-COOLED N_2O PROBED BY IR--MILLIMETER-WAVE DOUBLE RESONANCE*
J. Bosmann, T. F. Giesen, and G. W. Fuchs

H14 – *OFF-AXIS CAVITY RING-DOWN SPECTROSCOPY OF JET-COOLED MOLECULES AT 3 μM*
Fabian Peterß, Xiaoyu Zhou, Thomas F. Giesen, Guido W. Fuchs

H15 – *BENCHMARKING EDOT: PRECISE STRUCTURAL DETERMINATION OF THE MONOMER AND ITS WATER CLUSTER BY JET-COOLED ROTATIONAL SPECTROSCOPY*
Andrea Maggio, Jinxi Huang, Cristina Bagnacavalli, Luca Evangelisti, Assimo Maris, Sonia Melandri

H16 – *COMPACT LASER ABLATION SOURCE SYSTEM FOR HIGH-RESOLUTION MOLECULAR SPECTROSCOPY*
Xiaoyu Zhou, Fabian Peterß, Thomas Giesen, Guido W. Fuchs

H17 – *MICROWAVE SPECTRA OF 2-CHLORO-3-METHYLTHIOPHENE AND 2-CHLORO-5-METHYLTHIOPHENE: LOW-BARRIER METHYL INTERNAL ROTATION AND EXACT TREATMENT OF CHLORINE NUCLEAR QUADRUPOLE COUPLING*
K. J. Koziol, H. V. L. Nguyen

H18 – ^{13}C- *AND* ^{15}N-*MONOSUBSTITUTED ISOTOPOLOGUES OF* HC_3N*: CHARACTERIZATION OF THE RESONANCE SYSTEMS*
G. Panizzi, M. Nonne, L. Bizzocchi, M. Melosso, S. Alessandrini, and C. Puzzarini

H19 – *COMPARATIVE ROTATIONAL SPECTROSCOPIC STUDY OF HYDRATED CO_2 AND SO_2 MOLECULAR CLUSTERS*
Z. Wang, D. Yélamos, E. Neeman, A. Lesarri, C. Bermúdez, C. Calabrese

H20 – *THE HIGH RESOLUTION SPECTRUM OF THE ν_2 BAND OF THE ELUSIVE $HSCO^+$*
José Luis Doménech, Weslley G. D. P. Silva, Valerio Lattanzi, Sven Thorwirth, Stephan Schlemmer, and Oskar Asvany

H21 – *HIGH-RESOLUTION INFRARED SPECTROSCOPY OF N_2O BROADENED BY HE, AND H_2 TO ASSIST IN ANALYSIS OF EXOPLANETARY ATMOSPHERES.*
Himanshi Singh, Hayley A. Bunn, Silvia Spezzano, Laura Schöller, Paola Caselli

H22 – *LASER SPECTROSCOPY OF FeH: CHARACTERIZING THE MAGNETIC RESPONSE OF SELECT LEVELS IN THE $A\,^4\Pi$ STATE*
T. E. Blackmore, D. W. Tokaryk, A. G. Adam, P. Crozet, A. J. Ross

H23 – *MOLECULAR-LEVEL INSIGHTS INTO* CO_2 *CAPTURE AND COMPETITIVE BINDING WITH WATER IN ORTHO-FLUOROANILINE: A ROTATIONAL STUDY*
R. B. L. Vieira, A. Nunes, N. M. Campos, R. J. C. Roque, S. R. Domingos

H24 – *AN AB INITIO ROVIBRATIONAL LINELIST FOR HPO*
Ryan Mok, Fangping Liu, Sergey N. Yurchenko

H25 – *PROBING THE SURFACE CHEMISTRY TOWARDS INTERSTELLAR DUST GRAINS: (SUB-)MILLIMETER-WAVE SPECTROSCOPIC CHARACTERIZATION OF NH_2CL*
Michela Nonne, Audrey Coutens, Elias Neeman, Jean-Claude Guillemin, Manuel Goubet, Valérie Vallet, Olivier Pirali, Holger S. P. Müller, Jean-Christophe Loison, Marie-Aline Martin-Drumel

H26 – *MACHINE LEARNING IN THE EXOMOL PROJECT*
Joseph S. Andrews, Marco G. Barnfield, Elizabeth R. Guest, Sergey N. Yurchenko, and Jonathan Tennyson

H27 – *3,3,4,4,5,5,6,6,6-NONAFLUOROHEXAN-1-OL: A COMBINED ROTATIONAL SPECTROSCOPY AND QUANTUM-CHEMICAL STUDY OF A PARTIALLY FLUORINATED ALIPHATIC ALCOHOL*
Filippo Baroncelli, Tommaso Coccia, Andrea Vasquez, Aran Insausti, Luca Evangelisti, Assimo Maris, Emilio J. Cocinero, Sonia Melandri

H28 – *INFRARED AND MICROWAVE SPECTROSCOPY OF $(CO)_2$ - WATER TRIMERS AND OBSERVATION OF A NEW SYMMETRIC ISOMER*
Simon Collignon, Aaron J. Barclay, Jordan A. Claus, Andrea Pietropolli Charmet, Andrew R. W. McKellar, Clément Lauzin, Nasser Moazzen-Ahmadi

H29 – *BRIDGING THEORY AND EXPERIMENT: CO-N_2 3–0 BAND CASE STUDY*
Klaudia Chętnik, Artur Olejnik, Nikodem Stolarczyk, Michał Żółtowski, Hubert J. Jóźwiak, Michał Słowiński, Szymon Wójtewicz, Katarzyna Bielska, Piotr Masłowski, Hubert Cybulski, Berta Fernández, Christian Henriksen, Agata Cygan, Roman Ciuryło, Daniel Lisak, Piotr Wcisło

H30 – *NEW BEYOND-VOIGT LINE-SHAPE PROFILE RECOMMENDED FOR THE HITRAN DATABASE*
Michał Słowiński, Piotr Wcisło, Nikodem Stolarczyk, Hubert J. Jóźwiak, Daniel Lisak, Roman Ciuryło, Agata Cygan, Franz Schreier, Christopher D. Boone, Antonio Castrillo, Livio Gianfrani, Yan Tan, Shui-Ming Hu, Erin M. Adkins, Joseph T. Hodges, Ha Tran, Ngoc Hoa Ngo, Jean-Michel Hartmann, Serge Béguier, Alain Campargue, Robert J. Hargreaves, Laurence S. Rothman, Iouli E. Gordon

H31 – *A COMPLETE ROVIBRATIONAL LEVEL SCHEME FOR NH_3 NEAR 7000 CM^{-1}*
Peter Čermák, Karvan Kaushal, Ondřej Votava

H32 – *PRECISION COHERENT MICROWAVE SPECTROSCOPY OF THE R(0) TRANSITION OF OCS IN A KU-BAND WAVEGUIDE*
Simon Collignon, Dimitri Lederer, Clément Lauzin

H33 – *ACCURATE ROVIBRONIC LINE LISTS OF HYDROGEN FLUORIDE*
Nariman Abu El Kher, Sergey N. Yurchenko, Nayla El-Kork

H34 – *WIDE-RANGE FROST-POINT MEASUREMENT USING A CRDS-BASED MINIATURIZED SENSOR*
Hisashi Abe

H35 – *EXPLORING HIGH AND LOW METHYL TORSIONAL BARRIERS IN 2-CHLOROPICOLINES: THE MICROWAVE SPECTRA OF 2-CHLORO-3-PICOLINE AND 2-CHLORO-PICOLINE*
M. Buttkus-Barth, H. V. L. Nguyen

H36 – *TORSIONAL VIBRATIONS AND SYMMETRY OF $B(OH)_3$: TESTING THE UNITED CONFIGURATION APPROACH TO SELECTED NON-RIGID MOLECULES*
George Pitsevich, Alex Malevich

H37 – *CAN DVR AND FOURIER METHODS REPRODUCE THE EXACT $(2\ell + 1)$ — FOLD DEGENERACY OF THE FREE RIGID ROTOR?*
George Pitsevich, Alex Malevich

I: Invited Speakers

Wednesday, September 02, 2026, 09:00 – 10:30
Chair: Konstantin Vodopyanov

I1 – *OPTICAL FREQUENCY COMB SPECTROSCOPY IN COLD AND NON-EQUILIBRIUM MOLECULAR ENVIRONMENTS*
Lucile Rutkowski

I2 – *PRECISION COLLISIONAL LINE-SHAPE ANALYSIS AND QUANTUM GAS METROLOGY VIA ALL-FREQUENCY-DOMAIN SPECTROSCOPY*
Yan Tan, Shui-Ming Hu, Jin Wang, Jin-Ke Li, Qi Huang, Hui Liang, Chang-Le Hu

J: Mini Symposium: Molecular Ion Spectroscopy

Wednesday, September 02, 2026, 11:00 – 12:30
Chair: José Luis Doménech

J1 – *REVEALING HIGH-RESOLUTION SPECTRA OF HYDROCARBON CATIONS WITH LEAK-OUT SPECTROSCOPY*
Oskar Asvany, Philipp Schmid, Weslley Silva, Divta Gupta, Samuel J. P. Marlton, Thomas Salomon, Sven Thorwirth and Stephan Schlemmer

J2 – *DEUTERONATED FORMALDEHYDE IN FOCUS: THEORY AND EXPERIMENT*
Denis Comte, Mattia Melosso, Hunarpreet Kaur, Dennis F. Dinu, Ernest A. Michael, Terri E. Field-Theodore, Weslley G. D. P. Silva, Silvia Alessandrini, Luca Bizzocchi, Sven Thorwirth, Klaus R. Liedl, Sandra Brünken, Cristina Puzzarini, Stephan Schlemmer, Oskar Asvany

J3 – *HIGH RESOLUTION ROVIBRATIONAL AND ROTATIONAL SPECTROSCOPY OF HC_3N^+*
Eline Plaar, Annemarie Sich, Oskar Asvany, Sven Thorwirth, Weslley G. D. P. Silva and Stephan Schlemmer

J4 – *HIGH-RESOLUTION SPECTROSCOPY OF ELUSIVE PROTONATED METHANOL ($CH_3OH_2^+$)*
Weslley G. D. P. Silva, Oskar Asvany, Sven Thorwirth, Isabelle Kleiner, Iwona Gulaczyk, Marek Kreglewski, Miguel Sanz-Novo, Victor M. Rivilla, and Stephan Schlemmer

J5 – *ELECTRONIC LEAK-OUT SPECTROSCOPY OF COLD ASTROPHYSICALLY RELEVANT IONS IN THE GAS PHASE AND SEARCH FOR DIBS.*
Le Schneider, Samuel J. P. Marlton, Eline Plaar, Robin Jacobi

K: Ioannes Marcus Marci Session

Wednesday, September 02, 2026, 16:30 – 18:00
Chair: José Cernicharo

K1 – *MASSIVE BLACK HOLES AND GALAXIES: EXPERIMENTAL EVIDENCE AND COSMIC CO-EVOLUTION*
Reinhard Genzel

L: Invited Speakers

Thursday, September 03, 2026, 09:00 – 10:30
Chair: Cristóbal Pérez

L1 – *PUTTING LIGHT TO CHEMICAL USE: FROM SPECTATOR TO ACTIVATOR*
Wybren Jan Buma

L2 – *CHIRAL MOLECULES ACROSS ROTATIONAL, VIBRATIONAL AND ELECTRONIC SCALES: FROM MOLECULAR FINGERPRINTS TO ENANTIOSELECTIVE DETECTION AND CONTROL*
Thomas Giesen

M: Mini Symposium: Chirality and Chiral Recognition

Thursday, September 03, 2026, 11:00 – 12:30
Chair: Maria Eugenia Sanz and Melanie Schnell

M1 – *TESTING MECHANISMS FOR ASYMMETRIC SYNTHESIS USING CHIRAL TAG ROTATIONAL SPECTROSCOPY*
Brooks H. Pate

M2 – *VIBRATIONAL SPECTROSCOPY AND PHOTOELECTRON CIRCULAR DICHROISM OF CHIRAL COMPLEXES*
Anne Zehnacker

M3 – *SPIN-CHIRALITY COUPLING WITHOUT MAGNETIC FIELDS*
Philip Flores, Stefanos Carlström, Serguei Patchkovskii, Misha Ivanov, Andres Ordonez, Olga Smirnova

M4 – *PROBING CHIRAL RECOGNITION IN THE CARVONE-1-PHENYLETHANOL COMPLEX BY ROTATIONAL SPECTROSCOPY*
S. Indira Murugachandran, M. Eugenia Sanz

N: Invited Speakers

Friday, September 04, 2026, 09:00 – 10:30
Chair: Daniel Obenchain

N1 – *CONNECTING INTERSTELLAR ICE CHEMISTRY TO ASTRONOMICAL OBSERVATIONS: LABORATORY CONSTRAINTS FOR MOLECULAR ASTROPHYSICS*
Bernadette M. Broderick

N2 – *ACROSS WAVELENGTHS AND TOWARDS HIGH RESOLUTION: EXOMOL FOR JWST, ARIEL AND THE ELT ERA*
Sergey Yurchenko

O: Contributed Talks

Friday, September 04, 2026, 11:00 – 12:30

O-I (AI)

Chair: Amanda Ross

O-I.1 – *STARK-SHIFT DOUBLE-RESONANCE SPECTROSCOPY OF EXCITED STATES IN HIGH POLYADS OF METHANE*
Vinicius Silva de Oliveira, Adrian Hjältén, Michael Rey, Yuan Cao, Andrea Rosina, Kevin K. Lehmann, Aleksandra Foltynowicz

O-I.2 – *FREQUENCY COMB-CALIBRATED ROTATIONALLY RESOLVED SPECTRUM OF THE* $H_2O{-}CO_2$ *VAN DER WAALS COMPLEX IN THE 30H RANGE*
A.S. Bogomolov, S. Collignon, N. Moazzen-Ahmadi, M. Herman, and C. Lauzin

O-I.3 – *OPTICAL GAS THERMOMETRY AND AMOUNT-OF-SUBSTANCE METROLOGY USING CAVITY MODE-DISPERSION SPECTROSCOPY*
D. Lisak, S. Wójtewicz, A. Cygan, P. Wcisło, R. Ciuryło, K. Bielska

O-I.4 – *CAVITY-ENHANCED SPECTROSCOPY IN THE DEEP CRYOGENIC REGIME FOR QUANTUM SENSING AND METROLOGY*
Michał Słowiński, Kamil Stankiewicz, Marcin Makowski, Kamil Leon Sołtys, Bogdan Bednarski, Hubert Joachim Jóźwiak, Nikodem Stolarczyk, Mateusz Narożnik, Dariusz Kierski, Szymon Wójtewicz, Agata Cygan, Grzegorz Kowzan, Piotr Masłowski, Mariusz Piwiński, Daniel Lisak, Piotr Wcisło

O-I.5 – *SUB-KHZ VIBRATIONAL FREQUENCY MEASUREMENTS VIA MID-INFRARED SATURATION ABSORPTION SPECTROSCOPY*
S. Viel, M.N. Ngo, Y. Liu, N. Cahuzac, M. Saffre, D.B.A. Tran, R. Santagata, T. Durier, B. Dutta, E. Cantin, O. Lopez, A. Amy-Klein, G. L. Ngo, L. Lucia, S. Pirotta, A. Bousseksou, R. Colombelli, M. Manceau, B. Darquié

O-I.6 – *METROLOGY OF THE HELIUM DIMER WITH A SPECTRAL RESOLUTION OF 2.5 PPB AND A PRECISION OF 15 PPT*
Vincent Wirth, Janosch Jörg, Frédéric Merkt

O-II (AII)

Chair: Mattia Melosso

O-II.1 – *FIRST LIGHT OF A NEW 5.5–18* **GHz** *BROADBAND CRYOGENIC BUFFER GAS COOLING CP- FTMW SPECTROMETER*
Megan A. Crutchfield, Noureddin Osseiran, Lincoln Satterthwaite, Alberto Lesarri, Amanda L. Steber, and Cristóbal Pérez

O-II.2 – *SIX-FOLD METHYL INTERNAL ROTATION AND ^{14}N NUCLEAR QUADRUPOLE COUPLING IN THE MICROWAVE SPECTRA OF N-METHYLMALEIMIDE AND N-METHYLSUCCINIMIDE*
Safa Khemissi, Chisom A. Tiu, Isabelle Kleiner, Ha Vinh Lam Nguyen, Kyle Crabtree, A. O. Hernandez-Castillo

O-II.3 – *THIONATION TO THIOPIVALIC ACID: FROM SYNTHESIS TO A BROAD MICROWAVE ANALYSIS USING A VARIETY OF SPECTROSCOPIC TECHNIQUES*
K. J. Koziol, K. R. Leopold

O-II.4 – *MICROSOLVATION AND STRUCTURAL EVOLUTION OF METHYL ETHYL AND DIETHYL SULFOXIDES IN WATER CLUSTERS PROBED BY ROTATIONAL SPECTROSCOPY*
Liuting Wang, Wenhao Sun, Melanie Schnell

O-II.5 – *ROTATIONAL OBSERVATION OF OPEN-SHELL SINGLET PERSISTENT RADICAL PAIRS*
Yongtao Wang, Wenqin Li, Xiaolong Yi, Xinyu Wang, Meng Li, Jens-Uwe Grabow, Carlos Cabezas, Ibon Alkorta, Cristóbal Pérez, Alberto Lesarri, Haoran Li

O-II.6 – *NON-COVALENT INTERACTIONS OF PHTHALIDE HYDRATES STUDIED BY ROTATIONAL SPECTROSCOPY*
V. Tsoi, J. A. Claus, E. Neeman, M. Goubet, and M. E. Sanz