



Program ASA-HITRAN 2022

	Wednesday Aug. 24, 2022	Thursday Aug. 25, 2022	Friday Aug. 26, 2022
8:30 – 9:00	Welcome		
9:00 – 9:40	<p style="text-align: center;"><i>Chairwoman</i> : J. Buldyreva</p> <p>9:00 - 9:20 V. Tyuterev</p> <p style="text-align: center;">Recent studies in ozone spectroscopy and dynamics</p> <p>9:20 - 9:40 A. Campargue</p> <p style="text-align: center;">Water absorption spectroscopy: Continua measurements and Validation tests of spectroscopic databases</p>	<p style="text-align: center;"><i>Chairman</i> : V. Boudon</p> <p style="text-align: center;">A. J. FLEISHER</p> <p style="text-align: center;">Accurate molecular line intensities : Measurements, applications, and isotope ratios</p>	<p style="text-align: center;"><i>Chairwoman</i> : D. Viglaska</p> <p style="text-align: center;">D. MONDELAIN</p> <p style="text-align: center;">CO₂ and CH₄ line shape parameters with their temperature dependence in support of satellite missions</p>
9:40 – 10:00	<p style="text-align: center;">M. Birk</p> <p style="text-align: center;">Fourier-transform intensity measurements with 0.1% accuracy</p>	<p style="text-align: center;">P. Cacciani</p> <p style="text-align: center;">New analysis of ammonia spectrum in the 4700-5650 cm⁻¹ energy range. Importance of intensity transfer in case of quasi degenerated energy levels</p>	<p style="text-align: center;">O. Polyansky</p> <p style="text-align: center;">Review of the recent Progress on the Ab Initio Calculations of the Line Centers and Line Intensities</p>
10:00 – 10:20	<p style="text-align: center;">Z. Reed</p> <p style="text-align: center;">Comb-locked Cavity Ring-down Spectroscopy for Precise Measurements of Molecular Spectra</p>	<p style="text-align: center;">P. Cermak</p> <p style="text-align: center;">IR Ammonia spectra: Accuracy tests around 6000 cm⁻¹</p>	<p style="text-align: center;">F. Skinner</p> <p style="text-align: center;">Development of the HITRAN S₂ line list in the UV containing electronic transitions: B³Σ⁻_u- X³Σ⁻_g, B^π₃Π_u- X³Σ⁻_g, f¹Δ_u - a¹Δ_g</p>
10:20 – 10:40	<p style="text-align: center;">J. Hayden</p> <p style="text-align: center;">A table-top dual-comb spectrometer in the 5 – 10 μm range for line-parameter studies with 10⁻⁴ cm⁻¹ accuracy</p>	<p style="text-align: center;">A. Perrin</p> <p style="text-align: center;">First investigation of the ν₁ band of nitric acid (HNO₃) at 3551.766 cm⁻¹</p>	<p style="text-align: center;">E. Panier</p> <p style="text-align: center;">Update on RADIS: a fast line-by-line code for high-resolution infrared molecular spectra – GEISA database support and improved computation of sparse spectra</p>
10:40 -11:00	Coffee break		
11:00 –11:40	<p style="text-align: center;">M.-A. MARTIN</p> <p style="text-align: center;">An exotic use of the HITRAN database: Predicting laser lines for optically pumped terahertz molecular laser</p>	<p style="text-align: center;">E. MLAWER</p> <p style="text-align: center;">Recent development of the MT_CKD water vapor continuum</p>	<p style="text-align: center;">R. GAMACHE</p> <p style="text-align: center;">Calculating Line Shape Data for Spectroscopic Databases</p>
11:40 –12:00	<p style="text-align: center;">L. Manceron</p> <p style="text-align: center;">Far infrared spectroscopy of the ozone molecule and its isotopomers between 50 and 800 cm⁻¹</p>	<p style="text-align: center;">H. Fleurbaey</p> <p style="text-align: center;">H₂O-CO₂ binary absorption continua in the infrared transparency windows</p>	<p style="text-align: center;">J. Buldyreva</p> <p style="text-align: center;">Theoretical approach to high-resolution pressure-broadening parameters for remote sensing of exoplanetary atmospheres</p>
12:00 –12:20	<p style="text-align: center;">O. Ben Fathallah</p> <p style="text-align: center;">Measurements of Line Intensities and self-broadening coefficients in the ν₂, ν₅ and ν₃+ν₆ Bands of Methyl Iodide</p>	<p style="text-align: center;">P. Chelin</p> <p style="text-align: center;">Evaluating new settings and robustness for retrieved ammonia (NH₃) total columns from the OASIS ground-based remote sensing observatory</p>	<p style="text-align: center;">E. M. Adkins</p> <p style="text-align: center;">Application of theoretical constraints to model the measured temperature and wavelength dependence of collision-induced absorption in the 0.76 μm and 1.27 μm O₂ bands</p>
12:20 –12:40	<p style="text-align: center;">S. Kassi</p> <p style="text-align: center;">The (2-0) R(0) and R(1) transition frequencies of HD at the Dn/n=10⁻¹⁰ level of accuracy from Doppler spectroscopy at 80 K</p>	<p style="text-align: center;">C. Janssen</p> <p style="text-align: center;">Multi-spectral ozone spectroscopy for atmospheric applications: Recent experimental results at 5 μm and 10 μm and open questions</p>	<p style="text-align: center;">P. Wcislo</p> <p style="text-align: center;">Ab Initio Calculations of Line-Shape Parameters for Spectroscopic Databases</p>
12:40-14:00	Lunch time		
14:00 – 14:40	<p style="text-align: center;"><i>Chairman</i> : M. Rey</p> <p style="text-align: center;">S. YURCHENKO</p> <p style="text-align: center;">ExoMol 2022 : Molecular data for studies of exoplanets and other hot atmospheres</p>	<p style="text-align: center;"><i>Chairman</i> : D. Jacquemart</p> <p style="text-align: center;">A. FEDOROVA (online)</p> <p style="text-align: center;">High-resolution infrared spectroscopy of Mars' and Venus' atmospheres: recent results and perspectives</p>	<p style="text-align: center;"><i>Chairman</i> : V. Tyuterev</p> <p style="text-align: center;">K. VODOPYANOV</p> <p style="text-align: center;">High-resolution (<50 kHz) frequency-comb molecular spectroscopy in the mid-IR to terahertz spectral range</p>

14:40 – 15:20	G. MELLAU Experimentally-accurate complete molecular line lists	N. BATALHA (<i>online</i>) Building access and community standards for opacity data at the onset of next-generation atmosphere observations	M. SPEARRIN (<i>online</i>) Molecular line mixing effects at high temperatures and pressures: laboratory studies and sensing applications
15:20 – 15:40	T. Delahaye Evaluation and validation of spectroscopic databases: the GEISA2020 update and the preparation of GEISA2022	M. Lepère Methane line shape parameter measurements by mid-infrared QCL dual-comb spectroscopy – first results	R. Georges Non-LTE spectroscopy of the Tetradecad region of methane recorded in hypersonic flow
15:40 – 16:00	I. Gordon Collaborative (COVID-perturbed) transition from HITRAN2020 to HITRAN2024	S. Perot Non-LTE Cavity Ring-Down Spectroscopy of ethylene around 1.67 μm : modelling the atmospheres of hot Jupiter exoplanets	J. Harrison Quantitative spectroscopic measurements of atmospherically important fluorinated species
16:00 – 16:20	R. Hargreaves Updating the HITEMP database	W. Fakhardji Study of molecular absorption continua for telluric planets' atmospheres applications: calculations and measurements	R. Cole (presented by G. Rieker) Improving optical absorption models for CO ₂ at high pressure and temperature using dual frequency comb absorption spectroscopy up to 1000 K and 25 bar
16:20 – 16:40	Exhibitor – J. Schmitt (Bruker)	Exhibitor – J. Hayden (IRsweep)	
16:40 – 17:00	Coffee break	Coffee break	Coffee break
17:00 – 18:30	Poster session 1	Poster session 2	
19:30		Banquet	