

Programme of 15th SCSLSA

Venue: Hotel Tami Residence, Niš, Serbia, 9-13 June 2025.

The time zone is CEST

Monday, June 09, 2025

16:00 - Arrival

16:00 - Registration
17:00

17:00 - **Opening ceremony (P. Marziani and M.S. Dimitrijevic)**
17:30

DATABASES AND SPECTRAL LINE SHAPES FROM LABORATORY TO SPACE PLASMA

Chair: **M. S. Dimitrijević**

17:30 - 18:00	Joël Rosato France	Line shape modeling for the characterization of stellar atmospheres, magnetic fusion and magneto-inertial fusion experiments: an overview of current challenges
18:00 - 18:30	Ibtissem Hanachi Algeria	Calculation of Paschen lines for astrophysical and fusion plasmas
18:30 - 18:50	Anastasiya Farafontova Russia	An automatic molecular line identification using millimeter observations
18:50 - 21:30	Welcome reception	

Tuesday, June 10, 2025

SPECTRAL LINE SHAPES AND ASTROPHYSICAL PHENOMENA

Chair: **P. Marziani**

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| 09:30 - | Doron | Line-locked Outflows From Quasars |
| 10:00 | Chelouche | |
| | Israel | |
| 10:00 - | Mile Karlica | On non-thermal emission of inhomogeneous |
| 10:20 | Serbia | astrophysical sources |
| 10:20 - | Jelena Kovačević- | Changes in Relative Intensities Among Optical |
| 10:40 | Dojčinović | Fe II Lines in AGN Spectra |
| | Serbia | |
| 10:40 - | Coffee break | |
| 11:10 | | |

EMISSION LINES IN STARS, NEBULAE AND ACTIVE GALAXIES

Chair: **L. Č. Popović**

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| 11:10 - | Alexei Moiseev | Study of the ionized gas in and around |
| 11:40 | Russia | galaxies with MaNGaL emission lines mapper |
| 11:40 - | Anastasiya | Metallicity and small-scale kinematics in local |
| 12:00 | Yarovova | starforming galaxy NGC 2366 |
| | Russia | |
| 12:00 - | Ivan Milić | High-resolution, high-spectral fidelity |
| 12:20 | Serbia | spectropolarimetry of lower solar atmosphere |
| 12:20 - | Teodor Kostić | Multi-height probing of horizontal flows in solar |
| 12:40 | Serbia | photosphere using high-resolution |
| | | spectropolarimetry |
| 12:40 - | Djordje Mijović | Probing solar polar magnetic fields: a spatially- |
| 13:00 | Serbia | coupled approach with disambiguation |
| 13:00 - | Lunch break | |
| 15:00 | | |

SPECTRAL LINE PHENOMENA IN PLASMAS FROM DIFFUSE TO DENSE STATES

Chair: **V. Srećković**

15:00 - 15:30	Mohammed Koubiti France	Artificial intelligence applied to plasma spectroscopy
15:30 - 15:50	Evgeny Stambulchik Israel	The Lineshape Database project
15:50- 16:10	Milan S. Dimitrijević Serbia	On the Stark broadening of N V spectral lines
16:10 - 16:40	Coffee break	

POSTER SESSION: SPECTRAL LINES IN ASTROPHYSICAL AND LABORATORY PLASMA

Chair: **A. Kovačević**

16:40 - 17:40	Poster session	5 min presentations
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Wednesday, June 11, 2025

SURVEYS AND SPECTRAL LINE VARIABILITY IN EXTRAGALACTIC OBJECTS

Chair: **J. Kovačević-Dojčinović**

9:30 - 10:00	Mara Salvato Germany	The AGN content in eROSITA/DR1 and the spectroscopic follow-up
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10:00 - 10:30	Swayamtrupta Panda Chile	Probing Supermassive Black Holes in Distant Quasars with Photometric Reverberation Mapping in the Rubin era
10:30 - 10:50	Martin Ochmann Germany	Probing BLR Kinematics via Double-Peaked Ca II; A multiwavelength HST/Swift campaign of Mrk 279: Mapping the accretion disk and broad-line region
10:50 - 11:10	Marta Fatović Italy	Mg II Line Profile Variability in SDSS J2320+0024: Clues to a Binary Supermassive Black Hole
11:10 - 11:30	Malte Andrés Probst Germany	A clear view of the BLR through the variability of WPVS48
11:30 - 11:50	Uroš Meštrić Serbia	Very massive stars at cosmological distances
11:50 - 12:10	Saša Simić Serbia	Generating a large number of simulations for AGN spectra and light-curves using the PoSKI model
12:10 - 14:00	Lunch break	
14:00 - 20:00	Conference excursion with dinner	

Thursday, June 12, 2025

ATOMIC PARAMETERS AND SPECTRAL LINE SHAPES

Chair: **E. Stambulchik**

9:00 - 9:30	Gabriel Pérez-Callejo Spain	Stark broadening in solid-density plasmas: A computational approach
9:30 - 9:50	Milan S. Dimitrijević Serbia	On the Stark broadening of Sn III spectral lines

9:50 - 10:10	Vladimir Srećković Serbia	Rydberg Atoms in Astrophysical Plasmas: Modeling and Data Resources
10:10 - 10:30	Magdalena Christova Bulgaria	Analysis of Stark Broadening Parameters of N II Spectral Lines
10:30 - 10:50	Felix Iacob Romania	Calculation of the electron cation dissociative recombination cross section in interstellar media
10:50 - 11:30	Coffee break	

SPECTRAL LINE PHENOMENA IN EXTRAGALACTIC OBJECTS

Chair: **D. Chelouche**

11:30 - 12:00	Avinanda Chakraborty Italy	Spectral energy distribution modeling of broad emission line quasars: From X-ray to radio
12:00 - 12:20	Arina Arshinova Russia	Green bean galaxies and the fading echoes of AGN activity
12:20 - 12:40	Ana Lalović Serbia	Spectroscopic Analysis of Specific Angular Momentum in Disk Galaxies
12:40 - 13:00	Victor Manuel Patiño Álvarez Mexico	The Baldwin Effect and the Mg II - 3000 Å Luminosity Relation in Blazars
13:00 - 15:00	Lunch break	

SPECTRAL LINE PHENOMENA IN EXTRAGALACTIC OBJECTS

Chair: **D. Ilić**

15:00 - 15:30	Federica Bianco USA	Together we are stronger: synergies in astrophysics and AI to advance our understanding of the Universe
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15:30 - 15:50	Maria S. Kirsanova Russia	Investigating the origin and transport of water in the universe using submillimeter and millimeter spectral Lines
15:50 - 16:10	Benedetta Dalla Barba Italy	Interaction of the relativistic jet and the narrow- line region of PMN J0948+0022
16:10 - 16:30	Alfredo Amador- Portes Mexico	Exploring the Broad-Line Region of PKS 1510- 089: Jet Contributions and Mass Estimation
16:30 - 17:00	Coffee break	

SPECTRAL LINE SHAPES IN DIFFERENT SPACE CONDITIONS

Chair: **E. Bon**

17:00 - 17:20	Paola Marziani Italy	Evidence for a Stratified Accretion Disk Wind in AGN
17:20 - 17:40	Nataša Bon Serbia	Tracing Super Massive Black Hole Candidates via the Main Sequence of quasars
17:40 - 18:00	Milica Andjelić Serbia	X-ray spectroscopy of filaments in Cygnus Loop supernova remnant
18:00 - 18:20	Daniele Tagliacozzo Italy	Expanding SKIRT's Capabilities: X-ray Radiative Transfer in Partially Ionized Media
20:00 - 23:00	Conference Dinner	

Friday, June 13, 2025

SPECTRAL LINE RESEARCH: NEW FRONTIERS

Chair: **S. Panda**

10:00 - 10:30	Andjelka Kovačević Serbia	Probing AGN Variability Across Time and Space with LSST
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10:30 -	Mohammad	Emission line shape, time delay, and the size
10:50	Hassan Naddaf	of broad line region in 2.5D FRADO model
	Belgium	
10:50 -	Carina Fian	Probing Keplerian Rotation in Quasars using
11:10	Spain	Microlensing-Induced Line Profile Distortions
11:10 -	Coffee break	
11:30		

SPECTRAL LINE VARIABILITY AND OTHER CHARACTERISTICS IN AGNs

Chair: **S. Simić**

11:30 -	Tanja	Spectroscopic diversity of astrophysical tran-
12:00	Petrushevska	sients
	Slovenia	
12:00 -	Edi Bon	Fe II Reverberation Mapping in the Active Gal-
12:30	Serbia	axy NGC 5548
12:30 -	Djordje Savić	Long term spectropolarimetry of changing look
12:50	Serbia	active galactic nuclei NGC 3516
12:50 -	Official closing	
13:00	of the	
	conference	
13:00 -	Lunch break	
14:45		
15:00	Departure	

POSTERS

P01	Sladjana Marčeta Mandić	Refining Black Hole Mass Estimates in Type 1 AGN: Dependence on H β Line Properties
P02	Safia Mokadem	Spectral line shapes asymmetry in hot and dense plasma
P03	Jonhatan Uriel	Exploring Emission Line Variability and Jet-Broad Line Region Interaction in the Blazar Ton 599

P04	Guerrida Houria	Microfield distribution function in strongly magnetized plasmas
P05	Aleksandrina Smirnova	The extended ionized gas filaments in the merging group of galaxies Arp 118
P06	Lilia Shaliapina	Detection of Fe I emission lines in the spectrum of interacting/merging galaxies
P07	Sladjana Knežević	Deep VLT/MUSE Observations of SNR 0509-67.5
P08	Shoaib Jamal Shamsi	A Physics-Inspired Framework for AGN Classification in Time-Domain Surveys
P09	Nandita Das	Spectral decomposition of type 1 AGN optical spectra from SDSS and GAIA
P10	Thara Rubi Caba Pineda	Comparison of SDSS and Gaia QSO Data: Searching for Anomalies in QSO spectra