



Contributions: 20 min (15 min talk + 5 min discussion).

Monday (October 5th)

Welcome reception (sponsored by the Mendel University in Brno) - Location: Astronomical Institute, Slovak Academy of Sciences, 2nd floor

19:00- **Registration of participants** (Astronomical Institute, 2nd floor upstairs)

Welcome reception & informal discussion

Tuesday (October 6th)

Tatra Astro Summit - Day 1 - Location: Astronomical Institute, Slovak Academy of Sciences

9:45-10:00 **Welcome notes**

Stars and variability (Chair: Michal Zajaček)

10:00-10:20 **Ján Budaj**, WISE J005128.08+645651.7: An enigmatic R Coronae Borealis star

10:20-10:40 **Olga Vozyakova**, A Web-Based Workflow for Variable-Star Light Curves: Exploring and Processing TESS Data

10:40-11:00 **Natalia Shagatova**, Wind Geometry and Mass Transfer Efficiency in Symbiotic Binaries

11:00-11:30 **Coffee/Tea break**

High-energy astrophysics and particle acceleration (Chair: Natalia Shagatova)

11:30-11:50 **Jakub Gazdoš**, Kinetic study of shock formation in protostellar jets

11:50-12:10 **Jiri Blazek**, Ultra-High-Energy Cosmic Rays: Highlights from the Pierre Auger Observatory and the Prague Group

12:10-14:10 **Lunch in Hotel Lesná**

Cosmology and large-scale structure (Chair: Ján Budaj)

14:10-14:30 **Tomáš Šoltinský**, Forest without Trees is still Fruitful: Constraining the Thermal State of Neutral Intergalactic Medium at $z \sim 5.6$ with the 21-cm Forest

14:30-14:50 **Tomáš Ondro**, The formation of the first cosmic structures in hybrid Milgromian cosmology

14:50-15:20 **Coffee/Tea break**

Galaxy clusters and galactic nuclei (Chair: Tomáš Ondro)

- 15:20-15:40 **Congyao Zhang**, XRISM's View of Galaxy Clusters: New Insights and Recent Progress
- 15:40-16:00 **Vladimír Karas**, AGN obscuration by clouds orbiting close to SMBH
- 16:00-16:20 **Michal Zajaček**, Disentangling quasiperiodic eclipses of (active) galactic nuclei from stochastic variability
- 19:00- **Conference dinner in Tatranská Lomnica** (sponsored by the Institute of Physics, Czech Academy of Sciences)

Wednesday (October 7th)

Tatra Astro Summit - Day 2 - Location: Astronomical Institute, Slovak Academy of Sciences

Stars and compact objects (Chair: Petr Kurfürst)

- 9:45-10:05 **Július Koza**, From the Sun to the Stars: Synthesizing Sun-as-a-Star Observations of Flares
- 10:05-10:25 **Alex C. Gormaz-Matamala**, Revisiting the evolution of massive stars, from the Galactic Centre to the Magellanic Clouds
- 10:25-10:45 **Luboš Neslušan**, Differences between the original and current general relativity
- 10:45-11:15 **Coffee/Tea break**

Active galactic nuclei and high-energy astrophysics (Chair: Július Koza)

- 11:15-11:35 **Petr Kurfürst**, Red giant-jet interactions in galactic nuclei
- 11:35-11:55 **Patrik Čechvala**, The SST-1M project: update and future prospects
- 11:55-12:15 **Srija Reddy Muthyala**, Peering into the Multi-TeV Emission of Markarian 421 with SST-1M
- 12:15-14:15 **Lunch in Hotel Lesná**

Instrumentation and conference summary (Chair: Vladimír Karas)

- 14:15-14:35 **Shefali Negi**, Angstrom Exponent Calculation Using Wide-Field Stellar Photometry
- 14:35-14:55 **Michal Zajaček**, Traversing the Galactic Center in Space and Time (IAUS405): organizer's impressions
- 14:55-15:25 **Coffee/Tea break**
- 15:25-15:45 **General discussion led by Vladimír Karas on the topic "Aligning the Astronomy PhD with the 21st Century?"**
- 15:45-16:00 **Closing remarks**

Thursday (October 8th)

Astronomical Instruments in the High Tatras

- 9:00-10:00 **Visit of astronomical instruments at the Astronomical Institute** - Location: Astronomical Institute, Slovak Academy of Sciences
- 11:00-11:30 **Cable-car from Tatranská Lomnica to Skalnaté Pleso station** - location of the Base Station in Tatranská Lomnica
- 12:00(:20:40) **Groups taking a cable-car to Lomnický Peak Solar Observatory**
- 13:30-14:30 **Visit of the Skalnaté Pleso Observatory**
- 14:30- **Optional hike (weather permitting) from Skalnaté pleso to Hrebienok along the Tatranská Magistrála trail (red), visit of Zamkovský chalet on the way, OR, hike from Skalnaté pleso to Zelené pleso via Velká Svišťovka**