



**First Announcement
of the
International Conference**

Universe of Binaries, Binaries in the Universe

Telč, Czech Republic

September 7—11, 2019

(<https://binaries.physics.muni.cz/>)

MEETING ORGANIZERS

- [Department of Theoretical Physics and Astrophysics, Faculty of Science, Masaryk University, Brno, Czech Republic](#)
- [Astronomical Institute, Charles University, Prague, Czech Republic](#)
- [Astronomical Institute, Academy of Sciences of the Czech Republic, Ondřejov, Czech Republic](#)
- [Astronomical Institute of Slovak Academy of Sciences, Tatranská Lomnica, Slovakia](#)

Co-operating institutions:

- [Masaryk University centre Telč](#)

PROGRAM TOPICS

- Pro-Am collaboration in binary star research.
- Binaries in the epoch of GAIA.
- Big data, photometric surveys.
- Evolution of angular momentum: Formation of binary stars and of planetary systems.
- Planetary systems in binary stars.
- Variability of binary star components.
- Unsolved problems in structure and evolution of binary stars.
- New approaches in physical and phenomenological modelling of binary stars.
- Directions for further binary star research.
- The role of dedicated studies in the era of automatic pipelines.



INVITED SPEAKERS:

1. Professional-amateur binary star collaborations

Stella Kafka	AAVSO, USA	Citizen-scientists and binary star research
Yonggi Kim	CNU, Korea	Professional-amateur programs at Chungbuk National University
Francois Teysier	ARAS, France	Professional-Amateur Collaborations on Symbiotic Binaries

2. Binaries in the GAIA era

Dimitri Pourbaix	ULB, Belgium	Binaries in the Gaia era
Amaury Triaud	U. Birmingham, UK	The radial velocity survey BEBOP and the search for circumbinary planets

3. Large photometric surveys

Szilard Csizmadia	DLR, Germany	From CoRoT to PLATO: large photometric exoplanet space surveys for the planetary and binary star community
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4. Formation of binary stars and planetary systems

Max Moe	Steward O., USA	Formation and evolution of binary systems
Andrei Tokovinin	CTIO, Chile	

5. Effects of multiplicity on binary systems

Miroslav Brož	Charles U., Czech R.	Modelling multiple systems with eclipsing binaries
Andrei Tokovinin	CTIO, Chile	Close binaries in hierarchical stellar systems

6. Planetary systems in binary stars

David Martin	U. Chicago, USA	Circumbinary planets
Jerry Orosz	San Diego State U., USA	Planets in binary star systems

7. Pulsation of binary system components

Simon Murphy	U. Sydney, Australia	Pulsation in binaries
David Mkrтчian	NARIT, Thailand	Eclipsing binaries with pulsating mass-accreting components

8. Structure and evolution of binary systems

Mathieu Renzo	UVA, The Netherlands	Structure and evolution of massive binaries
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9. New approaches to physical modeling of binary stars

Andrej Prša	Villanova U., USA	Physical modeling of binary stars
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10. Cataclysmic Variables

Ed Sion	Villanova U., USA	Cataclysmic variables
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SCIENTIFIC ORGANIZING COMMITTEE (SOC):

Scientific Organising Committee:

- Borkovits, Tamasz (Baja Astronomical Observatory of Szeged University, Hungary)
- Conroy, Kyle (Villanova University, Dept. of Astrophysics and Planetary Sciences, USA)
- Guinan, Edward F. Kyle (Villanova University, Dept. of Astrophysics and Planetary Sciences, USA)
- Kafka, Stella (AAVSO, USA)
- Lee, Chung-Uk (Korea Astronomy and Space Science Institute, South Korea)
- Mkrtychian, David (National Astronomical Research Institute of Thailand, Thailand)
- Pribulla, Theodor (Astronomical Institute of Slovak Academy of Sciences, Slovakia)
- Southworth, John (Astrophysics Group, Keele University, United Kingdom)
- Tokovinin, Andrei A. (Cerro Tololo Inter-American Observatory, Chile)
- Toonen, Silvia (Anton Pannekoek Institute, University of Amsterdam, Netherlands)
- Torres, Guillermo (Harvard-Smithsonian Center for Astrophysics, USA)
- Tout, Christopher A. (Institute of Astronomy, University of Cambridge, United Kingdom)
- Van Hamme, Walter (Department of Physics, Florida International University, USA, vanhamme@fiu.edu) - chair
- Wilson, Robert E. (Astronomy Department, University of Florida, USA)

LOCAL ORGANIZING COMMITTEE (LOC):

Chair: Miloslav Zejda

Local Organising Committee:

- Janík, Jan (Department of Theoretical Physics and Astrophysics (DPTA), Masaryk University, CZ)
- Komžík, Richard (Astronomical Institute of Slovak Academy of Sciences, Slovakia)
- Paunzen, Ernst (DPTA, Masaryk University, CZ)
- Skarka, Marek (DPTA, Masaryk University, CZ)
- Suchan, Pavel (Astronomical Institute, Czech Academy of Sciences, CZ)
- Zásche, Petr (Astronomical Institute, Charles University, CZ)
- Zejda, Miloslav (DPTA, Masaryk University, CZ, zejda@physics.muni.cz) - chair



TRAVEL INFORMATION:

Telč is located about 150 km south-east of Prague, 100 km west of Brno. There are two main possibilities of reaching the Czech Republic by plane: Use either the airport in Vienna or in Prague and then continue from these two capitals.

Note:

There are also small regional airports: [Pardubice](#), [Brno](#), which offer connections to some destinations by means of low-cost airlines.

1. Prague – Vaclav Havel airport

connection to the Prague centre - Airport Express bus by [Czech railways](#) or [Prague public transport](#).

2. Vienna airport

Connection to Brno directly from the Vienna airport by [Regiojet](#) or [Flixbus](#) buses.

In general:

For railway or bus connections the actual information may be found at bus and train timelines <https://jizdnirady.idnes.cz/vlakyautobusy/spojeni/?lng=e>

Important note:

Organizers of the conference will arrange a bus transport (free of charge) from Prague and Brno to Telč on 6th September (Friday afternoon) and back on 11th September (Wednesday afternoon).

CONFERENCE VENUE:

The Masaryk university University Centre Telč provides study and education opportunities within the Masaryk University faculties in the Vysočina region. It offers study and education courses as a part of lifelong learning programs and reflects educational needs of the region. There are seminars, conferences and summer education courses held in the Centre. Thanks to extensive reconstruction, the modern integrated facility has been established in Telč, providing a very good level of education and study programmes under the patronage of the Masaryk University. Accommodation facilities as well as a library and an information point are included in the centre. The lecture rooms are equipped with modern audio-visual and computer equipment. There is also a café on the ground floor. The university centre is an ideal place for realizing study courses (especially the combined study programmes) as well as other different educational and social-cultural events such as seminars, conferences, trainings, off-site meetings, team-building sessions, summer/winter schools, etc. The facilities can be used not only by the Masaryk University members, but also by private companies for their presentation purposes and company stays, or just for individual or group events, tailored to the needs of wide variety of interested people.



The town of Telč is located near the southwestern border between Moravia and Bohemia, in the Vysočina Region of the Czech Republic. It is situated in a region which was thickly forested until the 13th century. The property consists of the historic town centre, with the castle situated in the middle, and of two bodies of water, originally having a defensive function.

The origins of the settlement are unclear: there was an early medieval settlement at Staré Město to the south-east of the present town, but there is no mention of Telč in documentary records before 1333-1335, when reference is made to the existence there of an important castle (and presumably also a church and settlement). The town of Telč, whose area covers 36 ha, was probably founded in the mid 14th century. The town itself is of special importance since it was founded on purpose to gain political and economic control over an area where there were deep forests in the 13th and 14th centuries.

The outstanding nature of Telč, in terms of the quality and authenticity of its cultural elements, the tangible evidence of its origins and evolution represented by its original layout and architecture, and its picturesque setting is unquestionable. The Renaissance castle forms the centre of the city. It is a major component of the urban townscape and it retains obvious traces of its Gothic precursor. The castle represents a unique authentic complex with its original material substance and decorations. Its original interior is imbued with Italian art.

The Historic Centre of Telč features a triangular market square surrounded by Renaissance and Baroque burgher houses (but whose origins are medieval). These houses are linked by a continuous arcade. Their facades are characterized by a great diversity as regards the choice of decorative elements. In the middle of the market square, there is a fountain and a plague column. A little further, there is the town hall, the Church of the Holy Spirit, the Jesuit College and the Gothic St. James parish church. Finally, the evidence of the origins and historical development of the city is provided by the city walls built of stone whose functioning was enhanced by a system of fishponds, originally built for its strategic security.

(taken from <https://whc.unesco.org/en/list/621>)

See also <https://en.wikipedia.org/wiki/Tel%C4%8D>, <https://www.telc.eu/>, <https://www.uct.muni.cz/>

WEATHER CONDITIONS:

The daily temperature of about +20°C (68°F) is typical for the late summer in September in the Czech Republic. During nights temperatures go down to +10°C (50°F). The short season of showers of rains can appear that time.

For detail weather information see

https://www.meteoblue.com/en/weather/forecast/modelclimate/tel%C4%8D_czech-republic_3064316

ACCOMMODATION, MEALS:

Accommodation is offered via the conference registration webpage. In such case we can offer a bit lower prices for accommodation in University centre or hotel Antoň. For simplicity the accommodation there is arranged only for the stay from September 6th (Friday) to 11th (Wednesday). If you have any other request, please contact the organizers.

Lunches will be provided in the conference dining room which is next to the conference hall. The average price of the main course will be about 150 CZK.



REGISTRATION:

Online registration is open via the [conference webpage](#).

Conference Deadlines

- **Early registration: until June 30, 2019 (CZK 6000,-)**
- **Late Registration: July 1 - September 1, 2019 (CZK 7500,-)**

Note: Registered participants can edit their registration form using login and password set during registration until the deadline of late registration.

Conference fee

The normal registration fee is **6000 CZK**, the late registration fee (after June 30, 2019) costs **7500 CZK**, and the reduced fee for accompanying persons is **2000 CZK**. The full registration fee includes coffee, admission to the reception, an excursion, a concert, an abstract booklet, and a copy of the proceedings. The reduced registration fee will only cover admission to the conference sessions, the reception and the concert. The current exchange rate are available at [Czech National Bank](#), approximately it is 1 EUR \approx 27 CZK / 1 USD \approx 23 CZK.

All conference fees will be forfeited if cancellation of attendance and accommodation is received after 15 August 2019; 70 % of the fees will be paid back for cancellations received before or on 15 August 2019.

TALKS, PAPERS:

The working language of the conference will be English.

The time allocated for an invited review talk is 40 min + 5 min for discussion, while the time allowed for a contributed talk is 15 min + 5 min for discussion. The speaker can use a local computer (Windows) or his/her laptop. We ask all speakers to make certain that their talks actually work (upload and check your presentation in advance). Our technicians will help you.

We invite participants to present their poster contributions during the 2 minutes oral presentations. The recommended poster size is A1 or A0.

Oral contributions and posters will be published as a special issue of the Contribution of Skalnaté Pleso Observatory and will be available online.

The abstract submission deadline is August 1, 2019.



SOCIAL EVENTS

Welcome reception – Friday, 6th September 20:00

Guided city walk/visit of the castle – Sunday, 8th September 16:00

Concert - Sunday, 8th September 20:00

Miloslav Zejda
chairperson of LOC

Walter van Hamme
chairperson of SOC