### Welcome to MODEST-24 & the Nicolaus Copernicus **Astronomical Center**

#### Mirek Giersz (chair) LOC

Dorota Śliwa Katarzyna Trwoga Katarzyna Morawska Przemysław Romaniuk Arkadiusz Hypki Abbas Askar Katarzyna Malinowska

Katarzyna Król Małgorzata Penkala Przemysław Romaniuk Paweł Ciecieląg Adam Poleszak Sergen Özdemir Pinaki Roy

Sudhagar Suyamprakasam Sreeta Roy Oliwia Ziółkowska **Rajeev Rathour Thomas Steinmetz** John E. Martínez Fernández Sohaib Ali

# **Exploring Dense Stellar Systems Across Cosmic Time**

# 19 - 23

**MODEST (Modelling and Observing DEnse STellar** systems) conference brings together researchers working on dense stellar systems and creates a space for theorists and observers to connect.

**TOPICS** • Numerical approaches to modelling dense stellar systems.

- Observational properties of dense stellar systems
- Formation of dense stellar systems across cosmic time
- Stellar multiplicity, exotica, and transients in star clusters
- Compact objects and gravitational wave sources

#### SOC Abbas Askar & Arkadiusz Hypki (co-chairs)

Alison Sills Anna Lisa Varri Barbara Lanzoni Carl Rodriguez Craig Heinke Enrico Vesperini Fabio Antonini Florent Renaud

Fred Rasio Holger Baumgardt Jarrod Hurley Manuel Arca Sedda Michiko Fujii Nadine Neumayer Selma de Mink Sebastian Kamann

Simon Portegies Zwart Silvia Toonen Thomas Puzia Tomasz Bulik Peter Berczik Long Wang





# **Useful Information**

#### Internet Connection & Power Supply

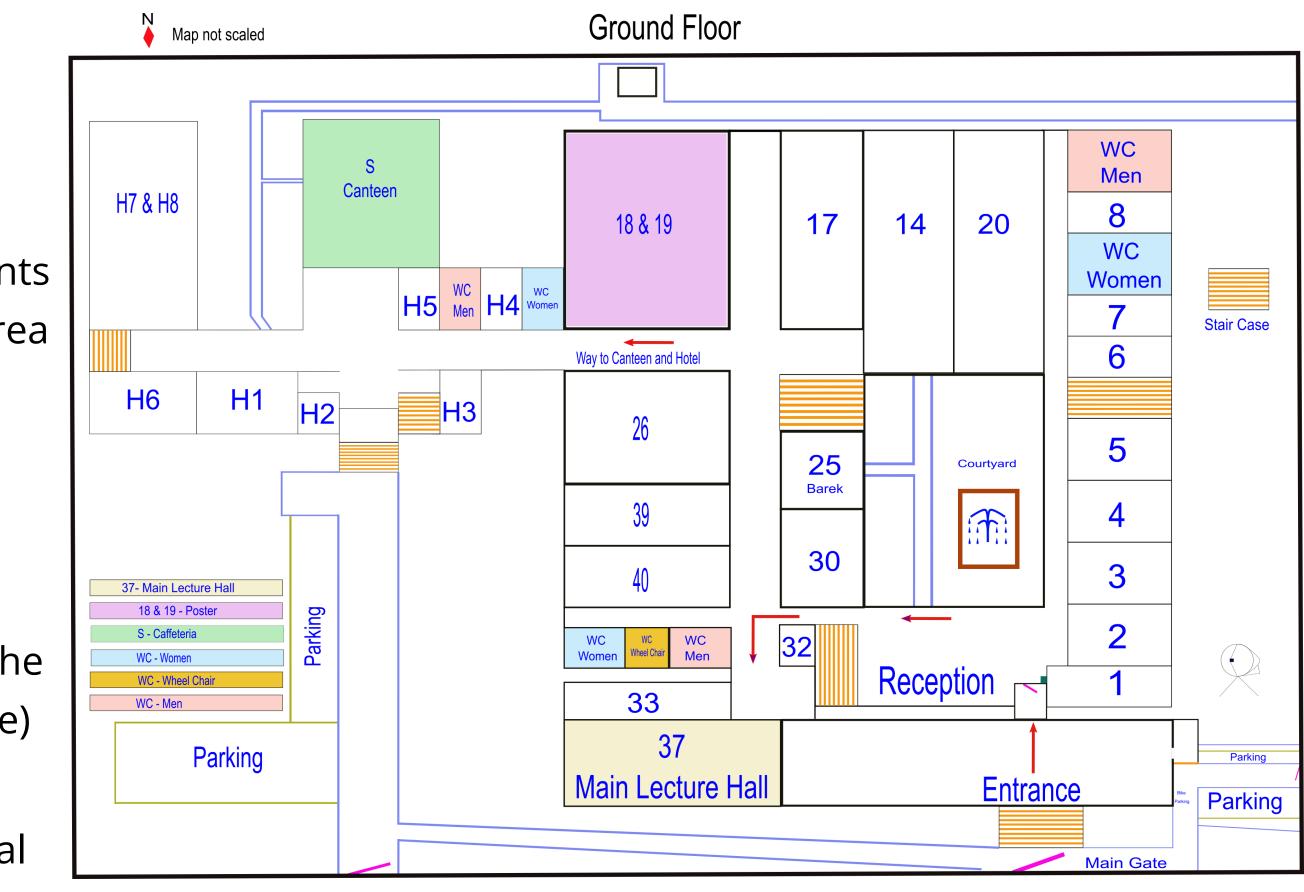
- Wifi Name: Modest24 Password: I like stars
- 2 electricity supply extensions in each row of the lecture hall
- **Poster Area:** Room 18/19
- **Coffee Break:** Coffee machines, tea, hot water and refreshments will be available outside the lecture hall and in the reception area

#### • Lunch & Canteen

- For lunch at canteen, please see the information on the conference webpage: <u>https://events.camk.edu.pl/event/95/</u> page/34-lunch-options
- Please fill out the form indicating if you would like to eat at the canteen and which menu option you would like (a day before)
- A list of all restaurants and lunch options close to the venue have been provided in Section 5 of the document on practical information:

https://events.camk.edu.pl/event/95/attachments/426/1169/ <u>Practical\_Information\_MODEST-24.pdf</u>





Map of Nicolaus Copernicus Astronomical Center (Ground Floor) https://events.camk.edu.pl/event/95/page/30-venue





# **Conference Schedule**

• An up-to-date schedule can be found on the conference website

### • Poster Viewing Session

- 17:30 today (there will be pizza)
- If you haven't already, please upload your flash poster presentation slide before 10:30 today

### • Virtual Poster Presentations

• 17:25 on Tuesday (20<sup>th</sup> Aug)

#### • Special Sessions at MODEST-24

- Wednesday (21<sup>st</sup> Aug) at 09:00, special session for For Prof. Rainer Spurzem & Prof. Roberto Capuzzo-Dolcetta
- Session on compact objects and gravitational wave sources has been dedicated to our late colleague Prof. Krzysztof (Chris) Belczyński
- Summary & Discussion Session
  - 15:50 on Friday (23<sup>rd</sup> Aug)

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#### **MODEST 24: Conference Overview**

Tuesday August 20	Wednesday August 21	Thursday August 22	Friday August 2
09:00 - 10:20 Observation of Dense Stellar Systems	09:00 – 10:50 Special Session for Prof. R. Spurzem & Prof. R. Capuzzo- Dolecetta	09:00 – 10:40 Stellar Multiplicity, Exotica & Transients (cont.)	09:00 – 10 Chris Belczynski Session on Compa Gravitational Wa
10:20 - 10:45 <b>Coffee Break</b>	10:50 – 11:20 <b>Coffee Break</b>	10:40 – 11:05 <b>Coffee Break</b>	10:20 – 10 <b>Coffee Br</b>
10:45 - 12:25 Observation of Dense Stellar Systems	11:20 – 12:20 Numerical Modelling: Stellar/Binary Evolution	11:05 – 12:45 Stellar Multiplicity, Exotica & Transients (cont.)	10:45 – 12 Chris Belczynski Session on Compa Gravitational Wa
12:25 - 14:00 Lunch Break (on own)	12-20 – 13:45 Lunch Break (on own)	12:45 – 14:15 Lunch Break (on own)	12:25 – 14 Lunch Break (e
14:00 - 15:40 Numerical Modelling	13:45 – 15:25 Stellar Multiplicity, Exotica & Transients	14:15 – 15:55 Stellar Multiplicity, Exotica & Transients (cont.)	14:00 – 15 Chris Belczynski Session on Compa Gravitational Wa
15:40 - 16:0: <b>Coffee Break</b>	15:25 to 17:00 Free Time	15:55 – 16:20 <b>Coffee Break</b>	15:20 – 15 <b>Coffee Br</b>
16:05 - 17:25 Numerical Modelling (cont.)	17:00 – 22:00 Boat Cruise and Conference Dinner	16:20 – 18:00 Chris Belczynski Memorial Session on Compact Objects & Gravitational Waves	15:50 – 17 Summary and Discu
17:25 – 18:00 Virtual Poster Presentation			
19:00: Museum Tour (Group 1)		19:00 Museum Tour (Group 2)	
	August 20   09:00 - 10:20   Observation of Dense Stellar   Systems   10:20 - 10:45   Coffee Break   10:45 - 12:25   Observation of Dense Stellar   Systems   0bservation of Dense Stellar   Systems   10:45 - 12:25   Observation of Dense Stellar   Systems   12:25 - 14:00   Lunch Break (on own)   14:00 - 15:40   Numerical Modelling   15:40 - 16:0:   Coffee Break   16:05 - 17:25   Numerical Modelling (cont.)   17:25 - 18:00   Virtual Poster Presentation   19:00:	August 20 August 21   09:00 - 10:20 09:00 - 10:50   Observation of Dense Stellar Systems Special Session for Prof. R. Spurzem & Prof. R. Capuzzo- Dolecetta   10:20 - 10:45 10:50 - 11:20   Coffee Break Coffee Break   10:45 - 12:25 11:20 - 12:20   Observation of Dense Stellar Systems Numerical Modelling: Stellar/Binary Evolution   12:25 - 14:00 12-20 - 13:45   Lunch Break (on own) 13:45 - 15:25   Stellar Multiplicity, Exotica & Transients Transients   15:40 - 16:0: 15:25 to 17:00   16:05 - 17:25 Boat Cruise and Conference Dinner   17:00 - 22:00 Boat Cruise and Conference Dinner   17:25 - 18:00 Virtual Poster Presentation   19:00: 19:00:	August 20 August 21 August 22   09:00 - 10:20 09:00 - 10:50 59ecial Session for Prof. R. Spurzem & Prof. R. Capuzo-Dolecetta 09:00 - 10:40   10:20 - 10:45 10:50 - 11:20 10:40 - 11:05   Coffee Break Coffee Break Coffee Break   10:45 - 12:25 11:20 - 12:20 11:05 - 12:45   Stellar Multiplicity, Exotica & Transients (cont.) Stellar Multiplicity, Exotica & Transients (cont.)   10:45 - 12:25 11:20 - 12:20 11:05 - 12:45   Observation of Dense Stellar Systems Numerical Modelling: Stellar Multiplicity, Exotica & Transients (cont.) Stellar Multiplicity, Exotica & Transients (cont.)   12:25 - 14:00 12:40 - 13:45 12:45 - 14:15 Lunch Break (on own)   14:00 - 15:40 13:45 - 15:25 Stellar Multiplicity, Exotica & Transients (cont.)   Numerical Modelling 15:25 to 17:00 15:25 - 16:20   Coffee Break Free Time Coffee Break   16:05 - 17:25 Boat Cruise and Conference Dinner 16:20 - 18:00   Numerical Modelling (cont.) Boat Cruise and Conference Dinner Coffee Break   17:25 - 18:00 Intrue Presentation Coremation (Comparet Objects &

Please Note: All times are listed in Central European Summer Time (CEST).

https://events.camk.edu.pl/event/95/page/33-conference-schedule-overview

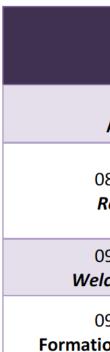




# Conference Schedule

### Instructions for speakers

- Please upload your PDF talk slides via the 'My Contributions' page on the conference website
- Talks should be uploaded at least 2 hours before the scheduled talk time
- If you plan on showing videos in your talk and cannot upload your talk slides as a PDF then please contact us well in advance
- All talks will be recorded and broadcasted live to virtual participants via Zoom.



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#### **MODEST 24: Conference Overview**

Monday August 19	Tuesday August 20	Wednesday August 21	Thursday August 22	Friday August 2
08:00 - 09:00 <i>Registration</i>	09:00 - 10:20 Observation of Dense Stellar Systems	09:00 – 10:50 Special Session for Prof. R. Spurzem & Prof. R. Capuzzo- Dolecetta	09:00 – 10:40 Stellar Multiplicity, Exotica & Transients (cont.)	09:00 – 10 Chris Belczynski Session on Compa Gravitational Wa
09:00 - 09:10 Plcome Remarks	10:20 - 10:45 <b>Coffee Break</b>	10:50 – 11:20 <b>Coffee Break</b>	10:40 – 11:05 <b>Coffee Break</b>	10:20 – 10 <b>Coffee Br</b>
09:10 - 10:30 ion of Dense Stellar Systems	10:45 - 12:25 Observation of Dense Stellar Systems	11:20 – 12:20 Numerical Modelling: Stellar/Binary Evolution	11:05 – 12:45 Stellar Multiplicity, Exotica & Transients (cont.)	10:45 – 12 Chris Belczynski Session on Compa Gravitational Wa
10:30 - 10:55 Coffee Break	12:25 - 14:00 Lunch Break (on own)	12-20 – 13:45 Lunch Break (on own)	12:45 – 14:15 Lunch Break (on own)	12:25 – 14 Lunch Break (e
10:55 - 12:35 ion of Dense Stellar ystems (cont.)	14:00 - 15:40 Numerical Modelling	13:45 – 15:25 Stellar Multiplicity, Exotica & Transients	14:15 – 15:55 Stellar Multiplicity, Exotica & Transients (cont.)	14:00 – 15 Chris Belczynski Session on Compa Gravitational Wa
12:35 - 14:00 h Break (on own)	15:40 - 16:0: <b>Coffee Break</b>	15:25 to 17:00 Free Time	15:55 – 16:20 <b>Coffee Break</b>	15:20 – 15 <b>Coffee Br</b>
14:00 - 15:20 tar Clusters & Galactic Nucleus	16:05 - 17:25 Numerical Modelling (cont.)	17:00 – 22:00 Boat Cruise and Conference Dinner	16:20 – 18:00 Chris Belczynski Memorial Session on Compact Objects & Gravitational Waves	15:50 – 17 Summary and Discu
15:20 - 15:45 Coffee Break	17:25 – 18:00 Virtual Poster Presentation			
15:45 - 16:25 tar Clusters & Galactic lucleus (cont.)				
16:25 - 18:30 ster Presentations & Viewing	19:00: Museum Tour (Group 1)		19:00 Museum Tour (Group 2)	

Please Note: All times are listed in Central European Summer Time (CEST).





### **Social Events**

- More information and exact locations available on: <u>https://</u> events.camk.edu.pl/event/95/page/35-<u>social-events</u>
- **Conference Dinner** 
  - Wednesday (21<sup>st</sup> Aug) from 17:00 onwards
  - Boat cruise on the Vistula River followed by dinner

#### **Museum Tour**

- Free guided tour of the National Museum of Technology in Warsaw
- Group 1 (Tuesday, 20<sup>th</sup> Aug) and Group 2 (Thursday, 22<sup>nd</sup> Aug)
- Arrival time at museum: 19:00

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> 12:35 Lunch Bre

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15:20 Coffe 15:45 Nuclear Star Cl Nuclei 16:25 **Flash Poster** 

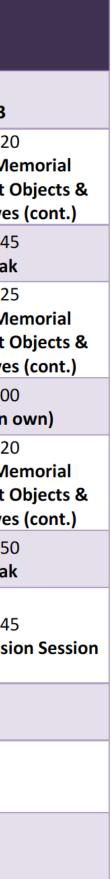
Please Note: All times are listed in Central European Summer Time (CEST).



#### **MODEST 24: Conference Overview**

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10:20 - 10:45 <b>Coffee Break</b>	10:50 – 11:20 <b>Coffee Break</b>	10:40 – 11:05 <b>Coffee Break</b>	10:20 – 10:45 <b>Coffee Break</b>
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### **Code of Conduct**

• Please read and adhere to the code of conduct posted on the conference website: https://events.camk.edu.pl/event/95/page/32-code-of-conduct

> The goal of MODEST-24 is to encourage a friendly exchange of knowledge and ideas among researchers. The organisers of MODEST-24 are committed to fostering an environment of inclusivity, respect, and professionalism for all participants, regardless of gender, sexual orientation, disability, physical appearance, ethnicity, nationality, age, or religion. Harassment or discrimination of any form will not be tolerated.

We expect all attendees to adhere to the following guidelines:

1) Maintain professional behaviour: Harassment, sexist, racist, or exclusionary comments or jokes are unacceptable. This includes any form of sustained disruption of talks or other events, inappropriate physical contact, sexual attention or innuendo, deliberate intimidation and stalking.

2) Respectful communication: All interactions should be suitable for a professional audience, with no use of violent, sexual or disrespectful language or imagery of any kind. Please listen to talks attentively, and any questions after the talk should be communicated respectfully and should not be demeaning or discourteous.

3) Kindness and courtesy: Treat others with kindness, respect, and consideration. Do not engage in disrespectful behaviour, insults, or put-downs towards other attendees or their research.

4) Use discretion and empathy: Be mindful that what may be acceptable to one person may be offensive to another. Use discretion to ensure that your words and actions demonstrate respect for others.

5) Compliance with requests: Participants must comply immediately with any request to stop inappropriate behaviour. Failure to do so may result in expulsion from the event.

#### • If you witness or experience any form of harassment or inappropriate behaviour, please report it to one of the designated contact points for the code of conduct:

- Abbas Askar (<u>askar@camk.edu.pl</u>)
- Arkadiusz Hypki (<u>ahypki@camk.edu.pl</u>)
- Dorota Śliwa (<u>dsliwa@camk.edu.pl</u>)





# Need help or assistance?

- If you have any questions about the conference or need help with anything, please feel free to contact the organizers:
- LOC members have yellow badges
- **Volunteers have red badges**
- **SOC have green badges**
- Via email: <u>loc-modest24@camk.edu.pl</u>

### **Slack Workspace**

- To join the MODEST-24 Slack Workspace, please use the invitation link below: <u>https://join.slack.com/t/modest-24/shared\_invite/zt-2nqt6y6fq-</u> <u>BsFpHe2Tn3cYvFoDEYbLpw</u>
- The platform can be used to post questions, share discussion points, and communicate with other participants, including those attending virtually.







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### Thank you for joining us — we hope that you have a **Slack Workspace** memorable and productive experience at MODEST-24! To join the MODEST-24 Slack Workspace, please use the invitation link

- below: https://join.slack.com/t/modest-24/shared\_invite/zt-2nqt6y6fg-<u>BsFpHe2Tn3cYvFoDEYbLpw</u>
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