

Large-scale structure of the Universe:

from galaxies to cosmology

2025



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# BUILDING EXCELLENCE IN THE STUDY OF GALAXIES AND COSMOLOGY AT THE UNIVERSITY OF TARTU (EXCOSM)





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## **Noam Libeskind**























#### **DATA** from multi-object spectroscopic survey facilities: WEAVE, DESI, MOONS, 4MOST, etc

### Cosmic Web

#### UL:

Advanced applied mathematics methods, cooperation with multiple disciplines

#### AIP:

N-body & hydrodynamical simulations; computing facilities; 4MOST; funding ERC funding success; financial management

#### RUG:

Simulations of gas accretion & outflow processes; cosmic web theory & galaxy; evolution; computing facilities; 4MOST; MSCA funding success; pre- & postaward; project management

#### **UTARTU:**

Analysis of observation data; observation selection function; mathematical models; computing facilities; 4MOST



Application of developed mathematical methods in other fields







Kick-off meeting
Potsdam workshop
Groningen workshop
Nancy workshop
Summer School
Final conference

## **Events**

#### **Upcoming events:**

- Summer school "Large-scale structure of the Universe: from galaxies to cosmology"; Estonia / 7-11 July 2025
- Groningen Workshop; The Netherlands / 22-23 October 2025
- Nancy Workshop; France / 2026
- Final conference; Tartu, Estonia / 2027

#### Past events:

- Kick-off Meeting; Tõravere, Estonia / 07-08 October 2024
- Potsdam Workshop; Germany / 19-20 March 2025
- Tartu-Tuorla meeting; Estonia / 2-4 June 2025







## **EXCOSM summer school**

"Large-scale structure of the Universe: from galaxies to cosmology"

7-11 July 2025 Haapsalu, Estonia

Home

Registration

#### Programme

Lecturers and instructors

Organising committee

Venue and travel information

- Day 1: Theory of the cosmic web
  - Rien van de Weygaert, Job Feldbrugge, Bernard Jones
- Day 2: Simulated cosmic web
  - Noam Libeskind, Daniela Galarraga-Espinosa
- Day 3: Observed cosmic web
  - Elmo Tempel, Punyakoti Ganeshaiah Veena
- Day 4: Cosmic web and galaxies
  - Edward N. Taylor, Peeter Tenjes
- Day 5: Mathematical modelling of the cosmic web
  - Radu Stoica, Didier Gemmerle, Nathan Gillot



