



ICTP | International Centre for Theoretical Physics
SAIFR | South American Institute for Fundamental Research

Campus of IFT-UNESP – São Paulo, Brazil

January 6 – 7, 2025

**MINICOURSE ON EFFECTIVE
 FIELD THEORY IN LARGE
 SCALE STRUCTURE**



HENRIQUE RUBIRA
 LMU/Cambridge

The Effective Field Theory of Large-Scale Structure (EFTofLSS) provides a powerful theoretical framework for understanding the distribution of matter and galaxies in the universe on cosmological scales. This course introduces the key developments in EFTofLSS, emphasizing its role in bridging theoretical physics with observational data from galaxy surveys.

Target audience: Master's and PhD students in Cosmology, and last-year undergrad students with solid theoretical physics background.

There is no registration.

More information:

ictp-saifr.org/meftlss2025



ICTP-SAIFR STEERING COMMITTEE

Atish Dabholkar (chair, ICTP director)
 Pasqual Barretti (UNESP rector)
 Márcio de Castro Silva Filho (FAPESP scientific director)
 Hugo Aguilaniu (Serrapilheira president-director)
 Helena Nader (Brazilian Academy of Sciences president)
 Juan Maldacena (South American representative)

ICTP-SAIFR SCIENTIFIC COUNCIL

Carlos Brito Cruz (chair, Elsevier)
 Rosario Fazio (ICTP)
 Ricardo Matheus (IFT-UNESP)
 William Bialek (Princeton Univ.)
 Eduardo Fradkin (Univ. of Illinois)
 Gabriela Gonzalez (Louisiana State Univ.)
 André de Gouvêa (Northwestern Univ.)
 Michael Green (Cambridge Univ.)
 Karen Hallberg (Balseiro Inst.)
 Luis Lehner (Perimeter Inst.)

ICTP-SAIFR STAFF

Nathan Berkovits (Director)
 Rogerio Rosenfeld (Vice-Director)
 Pedro Vieira (Perimeter-SAIFR Coordinator)
 Elisa Pomari (Activities Coordinator)
 Humberto Neto (Executive Secretary)
 Luiz Eduardo Moreira (Computer Systems Manager)
 Lilia Faria (Financial Manager)
 Daniel Almeida (Visitors Coordinator)
 Marrey Peres, Jr. (Operations Manager)
 Thiago Codinhoto (Technical Assistant)
 Felipe Saldanha (Communications Coordinator)