



Corfu2023: KICC-Villum Summer School on Gravitational Waves

SEPTEMBER 24 - OCTOBER 1, 2023

physics.ntua.gr/corfu2023/gw.html

Scientific Programme

1 Program Summary

Monday, September 25, 2023

9:30	10:30	Romero-Shaw, Isobel	History of GWs and current observational landscape
10:30	11:00	Coffee Break	
11:00	12:00	Gerosa, Davide	Principles of GW emission
12:00	12:30	Coffee Break	
12:30	13:30	Romero-Shaw, Isobel	Principles of GW detection
13:30	16:00	Lunch	
16:00	17:00	Gerosa, Davide	Formation channels for compact binaries
17:00	17:30	Coffee Break	
17:30	18:30	London, Lionel	Black Hole Perturbation Theory (1/2)
20:00	22:00	Welcome Reception	

Tuesday, September 26, 2023

9:30	10:30	London, Lionel	Black Hole Perturbation Theory (2/2)
10:30	11:00	Coffee Break	
11:00	12:00	Kavanagh, Chris	Post-Newtonian Theory for Compact Binaries (1/2)
12:00	12:30	Coffee Break	
12:30	13:30	Kavanagh, Chris	Post-Newtonian Theory for Compact Binaries (2/2)
13:30	16:00	Lunch	
16:00	17:00	Pound, Adam	Extreme Mass-Ratio Inspirals & Gravitational Self-Force (1/2)
17:00	17:30	Coffee Break	
17:30	18:30	Pound, Adam	Extreme Mass-Ratio Inspirals & Gravitational Self-Force (2/2)

Wednesday, September 27, 2023

10:00	12:00	Poster Session	
12:30	20:30	Excursion	

Thursday, September 28, 2023

9:30	10:30	Saridakis, Manos	Theories of Gravity Beyond GR (1/3)
10:30	11:00	Coffee Break	
11:00	12:00	Saridakis, Manos	Theories of Gravity Beyond GR (2/3)
12:00	12:30	Coffee Break	
12:30	13:30	Saridakis, Manos	Theories of Gravity Beyond GR (3/3)
13:30	16:00	Lunch	
16:00	19:00	Del Pozzo, Walter	Gravitational Wave Data Analysis (remote)
20:00	23:30	Greek Night	

Friday, September 29, 2023

9:30	10:30	Clough, Katy	Hands-on intro to numerical relativity (1/3)
10:30	11:00	Coffee Break	
11:00	12:00	Clough, Katy	Hands-on intro to numerical relativity (2/3)
12:00	12:30	Coffee Break	
12:30	13:30	Carullo, Gregorio	Tests of General Relativity (1/2)
13:30	16:00	Lunch	
16:00	19:00	Green, Stephen	Machine Learning

Saturday, September 30, 2023

9:30	10:30	Brito, Richard	Dark Matter & Fundamental Fields (1/2)
10:30	11:00	Coffee Break	
11:00	12:00	Brito, Richard	Dark Matter & Fundamental Fields (2/2)
12:00	12:30	Coffee Break	
12:30	13:30	Carullo, Gregorio	Tests of General Relativity (2/2)
13:30	16:00	Lunch	
16:00	17:00	Clough, Katy	Hands-on intro to numerical relativity (3/3)
17:00	17:30	Coffee Break	
17:30	18:30	Everyone	Q&A Discussion and Outro

2 Detailed Program

2.1 Monday, September 25, 2023

Time: 9:30 – 10:30

Speaker: Romero-Shaw, Isobel (University of Cambridge)

Title: History of GWs and current observational landscape

Time: 11:00 – 12:00

Speaker: Gerosa, Davide (University of Milano-Bicocca)

Title: Principles of GW emission

Time: 12:30 – 13:30

Speaker: Romero-Shaw, Isobel (University of Cambridge)

Title: Principles of GW detection

Time: 16:00 – 17:00

Speaker: Gerosa, Davide (University of Milano-Bicocca)

Title: Formation channels for compact binaries

Time: 17:30 – 18:30

Speaker: London, Lionel (King's College London)

Title: Black Hole Perturbation Theory (1/2)

2.2 Tuesday, September 26, 2023

Time: 9:30 – 10:30

Speaker: London, Lionel (King's College London)

Title: Black Hole Perturbation Theory (2/2)

Time: 11:00 – 12:00

Speaker: Kavanagh, Chris (University College Dublin)

Title: Post-Newtonian Theory for Compact Binaries (1/2)

Time: 12:30 – 13:30

Speaker: Kavanagh, Chris (University College Dublin)

Title: Post-Newtonian Theory for Compact Binaries (2/2)

Time: 16:00 – 17:00

Speaker: Pound, Adam (University of Southampton)

Title: Extreme Mass-Ratio Inspirals & Gravitational Self-Force (1/2)

Time: 17:30 – 18:30

Speaker: Pound, Adam (University of Southampton)

Title: Extreme Mass-Ratio Inspirals & Gravitational Self-Force (2/2)

2.3 Wednesday, September 27, 2023

2.4 Thursday, September 28, 2023

Time: 9:30 – 10:30

Speaker: Saridakis, Manos (National Observatory of Athens)

Title: Theories of Gravity Beyond GR (1/3)

Time: 11:00 – 12:00

Speaker: Saridakis, Manos (National Observatory of Athens)

Title: Theories of Gravity Beyond GR (2/3)

Time: 12:30 – 13:30

Speaker: Saridakis, Manos (National Observatory of Athens)

Title: Theories of Gravity Beyond GR (3/3)

Time: 16:00 – 19:00

Speaker: Del Pozzo, Walter (University of Pisa)

Title: Gravitational Wave Data Analysis

2.5 Friday, September 29, 2023

Time: 9:30 – 10:30

Speaker: Clough, Katy (Queen Mary, University of London)

Title: Hands-on intro to numerical relativity (1/3)

Time: 11:00 – 12:00

Speaker: Clough, Katy (Queen Mary, University of London)

Title: Hands-on intro to numerical relativity (2/3)

Time: 12:30 – 13:30

Speaker: Carullo, Gregorio (Niels Bohr Institutet)

Title: Tests of General Relativity (1/2)

Time: 16:00 – 19:00

Speaker: Green, Stephen (University of Nottingham)

Title: Machine Learning

2.6 Saturday, September 30, 2023

Time: 9:30 – 10:30

Speaker: Brito, Richard (CENTRA, Instituto Superior T cnico)

Title: Dark Matter & Fundamental Fields (1/2)

Time: 11:00 – 12:00

Speaker: Brito, Richard (CENTRA, Instituto Superior T cnico)

Title: Dark Matter & Fundamental Fields (2/2)

Time: 12:30 – 13:30

Speaker: Carullo, Gregorio (Niels Bohr Institutet)

Title: Tests of General Relativity (2/2)

Time: 16:00 – 17:00

Speaker: Clough, Katy (Queen Mary, University of London)

Title: Hands-on intro to numerical relativity (3/3)

Time: 17:30 – 18:30

Speaker: Everyone ()

Title: Q&A Discussion and Outro
