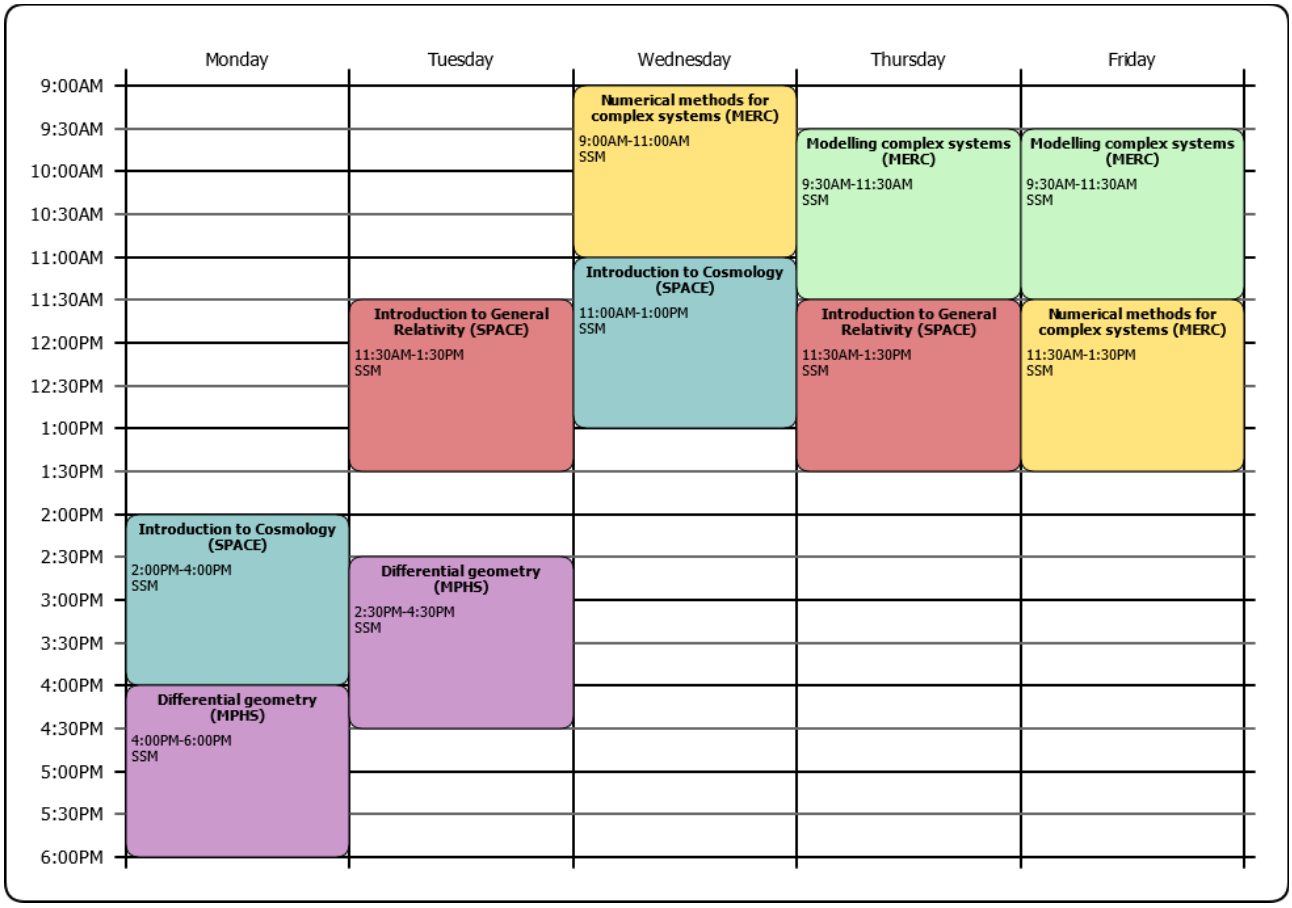
SSM PhD Courses -first bimester

Starting from 7th November 2022



MERC area

- **Modeling Complex Systems**
  Lecturer: Prof. Mario Di Bernardo
  Teaching mode: in-person (Aula 4) | Hours: 24
  Thu, Fri 9:30-11:30
  Team code: oddiy96

- **Numerical Methods for Complex Systems**
  Lecturer: Prof. Constantinos Siettos
  Teaching mode: in-person (Aula 4) | Hours: 24

Wed 9h-11h, Fri 11:30-13:30
Team code: bauxxuj

- **Seminar lectures: Theory and Applications of Contracting Dynamical Systems**
  Lecturers: Prof. Francesco Bullo
  Teaching mode: in-person (Aula 4) | Hours: 10
  Fri 18/11 h14:30-17, Mon 21/11 h10-12:30, Tue 22/11 h14-16:30, Wed 23/11 h14-16:30
  Zoom Meeting ID: 853 3497 9333 | Passcode: merc_zoom
  Meeting link: https://us02web.zoom.us/j/85334979333?pwd=ZTcrSlZoT2Q5aWRZODVoTXpHQVpkZz09

MPHS area

- **Differential Geometry**
  Lecturer: Dr. Alessandro Zampini
  Teaching mode: in-person (Aula 1 and 4) | Hours: 24
  Mon (Aula 1) 16h-18h, Tue (Aula 4) 14:30-16:30
  Team code: g9054ic

SPACE area

- **Introduction to General Relativity**
  Lecturer: Prof. Salvatore Capozziello
  Teaching mode: in-person (Aula 4) | Hours: 24
  Tue,Thu 11:30-13:30
  Team code: obfn9jx

- **Introduction to Cosmology**
  Lecturer: Dr. Micol Benetti and Dr. Rocco D'Agostino
  Teaching mode: in-person (Aula 4) | Hours: 24
  Mon 14h-16h, Wed 11h-13h
  Team code: capwjx6

SSM PhD Courses -second bimester

Starting from 9th January 2023

MERC area

- **Probability calculus and elements of stochastic modelling**
  Lecturer: Dr. Giacomo Ascione, Dr. Caio Cesar Graciani Rodrigues
  Teaching mode: in-person (Aula 1) | Hours: 24
  Days: Mondays and Thursdays
  Hours: Mon 9h-11h, Thu 11h-13h
  Team code: xzpnfa7

MPHS area

- **Partial Differential Equations**
  Lecturer: Prof. Carlo Nitsch
  Teaching mode: in-person (Aula 1) | Hours: 24
  Days: Tuesdays and Thursdays (except for Tuesday 07/02, which is replaced by Wednesday 08/02)
  Hours: 9h-11h (except for Wednesday 08/02 11h-13h)
  Team code: vxgd7v8

- **Numerical Treatment of PDEs**
  Lecturer: Prof. Francesco Calabrò
  Teaching mode: in-person (Aula 1) | Hours: 24
  Days: Mondays and Wednesdays (except for Monday 09/01, which is replaced by Friday 20/01)
  Hours: Mon 11h-13h, Wed 9h-11h (Friday 20/01 11h-13h)
  Team code: fdticho

- **Micromagnetism and Spintronics**
  Lecturer: Prof. Claudio Serpico, Prof. Massimiliano D'Aquino
  Teaching mode: in-person (Aula 1, expect Tue 24/01 in Aula 4) | Hours: 12
  Days: 16-18-20-23-24-25 January
  Hours: 14:30-16:30
  Team code: kw6i2ho

SPACE area

- **Introduction to Astrophysics**
  Lecturer: Prof. Guido Risaliti
  Teaching mode: in-person (Aula 4) | Hours: 24
  Days: 23-24-30-31 January, 6-7-20-21 February
  Hours: Mon 14h-17h, Tue 9h-12h
  Team code: oy6p0kj

- **Statistical Mechanics: from basic concepts to applications in Complex Systems, Astrophysics and beyond**
  Lecturer: Prof. Mario Nicodemi
  Teaching mode: online | Hours: 24
  Days: 9-11-13-16-18-20-24-25-27-31 January, 1-3 February
  Hours: 16h-18h
  Team code: ntke435

SSM PhD Courses - Third bimester

Starting from 27th February 2023

MERC area

- **Fundamental of Natural Hazard Forecasting**
  Lecturer: Prof. Warner Marzocchi
  Email: warner.marzocchi@unina.it
  Teaching mode: in-person (Room 4, Room I9 only on Wed. March 1st) | Hours: 24
  Days: variable, see full schedule here
  Hours: variable, see full schedule here
  Team code: ddna2ls

- **Risk Analysis in Industrial Chemical Processes**
  Lecturers: Prof. Almerinda Di Benedetto, Prof. Roberto Andreozzi, Prof. Ernesto Salzano
  Email: almerinda.dibenedetto@unina.it, roberto.andreozzi@unina.it (or randreoz@unina.it) ermesto.salzano@unibo.it
  Teaching mode: in-person (Room 4 and Room 1) | Hours: 24
  Days: variable, see full schedule here
  Hours: variable, see full schedule here
  Team code: pczhzxc

- **Performance-based Seismic Risk Analysis of Complex Infrastructural Systems**
  Lecturer: Prof. Iunio Iervolino
  Email: iunio.iervolino@unina.it
  Teaching mode: in-person (Room 1) | Hours: 24
  Days: variable, see full schedule here
  Hours: variable, see full schedule here
  Team code: 45ei29i

MPHS area

- **Soft Matter in Flow: Modelling and Simulation**
  Lecturer: Prof. Pier Luca Maffettone, Dott. Marco Trofa
  Teaching mode: in-person (Room 1) | Hours: 24
  Days: See the timetable here
  Hours: See the timetable here
  Team code: jxtp8o5

- **Molecular Thermodynamics of Materials: An Introduction**
  Lecturer: Prof. Giuseppe Milano, Dott. Antonio De Nicola
  Teaching mode: in-person (Room 1) | Hours: 24
  Days: See the timetable here
  Hours: See the timetable here
  Team code: 5y840uw

- **Physics of matter from the zepto-scale to the macro-scale**
  Lecturer: Prof. Fabio Ambrosino, Prof. Rosario Fazio, Prof. Lorenzo Marrucci
  Teaching mode: in-person (Room 1) | Hours: 24
  Days: See the timetable here
  Hours: See the timetable here
  Team code: i7kvqbz

SPACE area

- **Introduction to Quantum Mechanics**
  Lecturer: Prof. Gennaro Miele
  Teaching mode: in-person (Room 4) | Hours: 24
  Days: 7-9-14-16-21-23-28-30 March, 4-11-13-18 April
  Hours: Tues-Thu 9h-11h
  Team code: mu4zib4

- **Introduction to Astroparticle Physics**
  Lecturer: Prof. Francesco Vissani
  Teaching mode: in-person | Hours: 24
  Days: 28 February, 7 and 21 March in Room 1. On 1, 8 and 22 March in Room 4. On 14 and 15 March, the lessons will be held online.
  Hours: Tues 15h-18h, Wed 9h-12h
  Team code: 8bxbzmo

- **Black Hole Physics**
  Lecturer: Dr. De Falco
  Teaching mode: in-person (Room 4) | Hours: 12
  Days: 27 and 29 March; 3-5-12-13 April.
  Hours: 9h-11h all days except 13 April 11h – 13h
  Team code: wrdveb1

SSM PhD Courses – Block 4

Starting 24th April 2023

MERC area

- **Introduction to Reinforcement Learning and Data-Driven Control for Complex Systems**
  Lecturer: Prof. Mirco Musolesi (with seminars from Prof. Giovanni Russo)
  Email: m.musolesi@ucl.ac.uk
  Teaching mode: in-person | Hours: 24
  Timetable: **here**
  Team code: zhht0af
  Broadcast online on Zoom:
  https://us02web.zoom.us/j/81523131568?pwd=K0VqcFAxZEFUN3czVkV0ckZ1MDJoQT09
  Meeting ID: 815 2313 1568
  Passcode: merc_zoom

- **Stochastic differential equations and singular stochastic control**
  Lecturer: Prof. Tiziano De Angelis
  Email: tiziano.deangelis@unito.it
  Teaching mode: in-person | Hours: 24
  Timetable: **here**
  Team code: or3i2xa

- **Networks beyond pairwise interactions** (seminar course)
  Lecturer: Prof. Stefano Boccaletti, Prof. Regino Criado
  Email: stefano.boccaletti@isc.cnr.it, regino.criado@urjc.es
  Teaching mode: in-person | Hours: 10
  Timetable: **here** (starts 12th April 2023)
  Team code: a9itdkv

- **Theory and applications of delay differential equations**
  Lecturer: Prof. John Hogan
  Email: s.j.hogan@bristol.ac.uk
  Teaching mode: in-person | Hours: 12
  Timetable: **here**
  Team code: qipiscs

MPHS area

- **Theory and applications of delay differential equations**
  Lecturer: Prof. John Hogan
  Email: s.j.hogan@bristol.ac.uk
  Teaching mode: in-person | Hours: 12
  Timetable: Check the Timetable
  Team code: qipiscs

- **Fundamentals of Computational Fluid Dynamics**
  Lecturer: Prof. Alessandro Veneziani
  Email: avenez2@emory.edu
  Teaching mode: online & in-person | Hours: 24
  Timetable: Check the Timetable
  Team code: sv67imn

SPACE area

- **Introduction to Deep Learning**
  Lecturer: Prof. Poggi and Dr. Gragnaniello
  Email: poggi@unina.it , diego.gragnaniello@unina.it
  Teaching mode: Online | Hours: 24
  Timetable: wed at 10h; tue at 9h (except for 9-16 May, when it is scheduled to be at 15h-17h, starts: May 3)
  Team code: l8tg6jt

- **Quantum Information, Complexity and Black Holes**
  Lecturer: Prof. Alioscia Hamma
  Email: alioscia.hamma@unina.it
  Teaching mode: In-person | Hours: 12
  Timetable: tue- thu at 10h in Aula4. Starts: May 2; end: May 18.
  Team code: ok1fkxd

- **Standard Model of Fundamental Interactions**
  Lecturer: Prof. Sannino
  Email: sannino@cp3.sdu.dk
  Teaching mode: Online | Hours: 12
  Timetable: 22-24-29-30 May at 15h, May 25 at 16h and May 29 at 10h
  Team code: m1e56nm

- **Inflation in the Early Universe: theoretical developments and observational predictions**
  Lecturer: Prof. Matarrese
  Email: sabino.matarrese@pd.infn.it
  Teaching mode: Online | Hours: 12
  Timetable: June 7 at 15h, 8-9-14-15-16 June at 10h
  Zoom link: https://unipd.zoom.us/j/83734700868?pwd=bTRMWmplbis2VldNMlBIZ1Z0R1RtQT09
  Meeting ID: 837 3470 0868 | Passcode: 525381

- **Cosmic Distances**
  Lecturer: Prof. Massimo della Valle
  Email: massimo.dellavalle@inaf.it
  Teaching mode: Mixed | Hours: 12
  Timetable: June 21-22 at 10h-12h in presence in Aula4;
  June 28-29 at 10h-13h online
  Zoom link: https://us02web.zoom.us/j/84424579572?pwd=Lzh2OS9HT0FyUHpxbzFtSGJiblpRUT09
  Meeting ID: 844 2457 9572 | Passcode: IntrAstro

01-May -2023 to 05-May -2023

	Monday	Tuesday	Wednesday	Thursday	Friday
09:00					
09:30					
10:00					
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11:00		Delay Dynamical Systems (Classroom 1)	Delay Dynamical Systems (Classroom 1)		Delay Dynamical Systems (Classroom 1)
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12:00					
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13:00					
13:30					
14:00					
14:30				SSM Scientific Colloquium	
15:00					
15:30			Fundamentals of Computational Fluid Dynamics (Online)		Fundamentals of Computational Fluid Dynamics (Online)
16:00					
16:30					
17:00					
17:30					

08-May -2023 to 12-May -2023

	Monday	Tuesday	Wednesday	Thursday	Friday
09:00					
09:30					
10:00					
10:30					
11:00	Delay Dynamical Systems (Classroom 1)		Delay Dynamical Systems (Classroom 1)		Delay Dynamical Systems (Classroom 1)
11:30					
12:00					
12:30					
13:00					
13:30					
14:00					
14:30				SSM Scientific Colloquium	
15:00					
15:30	Fundamentals of Computational Fluid Dynamics (Online)		Fundamentals of Computational Fluid Dynamics (Online)		
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16:30					
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15-May -2023 to 19-May -2023

	Monday	Tuesday	Wednesday	Thursday	Friday
09:00					
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13:30					
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14:30				SSM Scientific Colloquium	
15:00					
15:30	Fundamentals of Computational Fluid Dynamics (Online)				
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22-May -2023 to 26-May -2023

	Monday	Tuesday	Wednesday	Thursday	Friday
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14:30				SSM Scientific Colloquium	
15:00					
15:30					Fundamentals of Computational Fluid Dynamics (Online)
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16:30					
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17:30					

29-May -2023 to 02-June -2023

	Monday	Tuesday	Wednesday	Thursday	Friday
09:00					
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14:00					
14:30				SSM Scientific Colloquium	
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15:30			Fundamentals of Computational Fluid Dynamics (Online)		
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05-June -2023 to 09-June -2023

	Monday	Tuesday	Wednesday	Thursday	Friday
09:00					
09:30					
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10:30					
11:00		Fundamentals of Computational Fluid Dynamics (Classroom 1)	Fundamentals of Computational Fluid Dynamics (Classroom 1)	Fundamentals of Computational Fluid Dynamics (Classroom 1)	
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14:30				SSM Scientific Colloquium	
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12-June -2023 to 16-June -2023

	Monday	Tuesday	Wednesday	Thursday	Friday
09:00					
09:30					
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10:30					
11:00		Fundamentals of Computational Fluid Dynamics (Classroom 1)	Fundamentals of Computational Fluid Dynamics (Classroom 1)		
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14:30				SSM Scientific Colloquium	
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