FIRST SEMESTER (Oct 7 – Jan 24)

Stochastic simulation methods - 10094				
Cooperative and critical phenomena - 10104				
Dynamical systems and chaos - 11001				
Stochastic processes - 11002				
Pattern formation - 11004				
Complex networks - 11003				
Introduction to complex systems - 11005				
Scientific presentation and visualization - 11007				

Oct 7 - 11

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:15 - 11:15	Introduction to complex systems 9:30-11:30	Introduction to complex systems	Stochastic simulation methods 9:30-11:00		
			Introduction		
11:30 - 13:30			to complex systems 11:15-13:15		

Oct 14 - 18

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:15 - 11:15	Introduction to complex systems	Introduction to complex systems	Stochastic simulation methods 9:30-11:00	Introduction to complex systems	Introduction to complex systems
11:30 - 13:30	Introduction to complex systems	Dynamical systems and chaos 11:30-13:00	Introduction to complex systems 11:15- 13:15	Dynamical systems and chaos 11:30-13:00	

Oct 21- Jan 24

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:30 - 11:15		Dynamical systems and chaos 9:45-11:15	Stochastic simulation methods 9:30-11:30	Pattern formation 9:45-11:15	Scientific presentation and visualization 9:30-11:15
	and critical				
11:30 - 13:00	and critical phenomena 10:00-13:00	Complex networks	Stochastic processes 11:45-13:15	Dynamical systems and chaos	Stochastic simulation methods 11:30-12:30 *

*December 13: Presentation of master thesis topics and 2nd semester optional subjects

Exam period: January 27 - February 14

MASTER IN PHYSICS OF COMPLEX SYSTEMS

SECOND SEMESTER (Feb 17 - May 22)

Subjects:

Nonlinear photonics - 11013					
Quantum physics for complex systems - 11006					
Non equilibrium collective phenomena – 11008 *					
Modeling and dynamics of neural systems – 11012 *					
Systems biology - 11010 *					
Statistical physics in biological systems – 11011 *					
Collective phenomena in social dynamics – 11015 *					
Spatiotemporal dynamics – 11009 *					
Quantum and nonlinear optics – 11014 *					
Quantum transport and quantum noise – 11016 *					
Information theory – 11017 *					
Turbulence and nonlinear phenomena in fluids - 11018 *					

Feb 17-21

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00- 10:50	9:00-10:50 Information theory	9:00-10:50 Nonlinear photonics	Statistical physics in biological systems	9:00-10:50 Modeling and dynamics of neural systems	Collective phenomena in social dynamics
			9:30-11:20		9:30-11:20
11:10- 13:00	11:10-13:00 Quantum and nonlinear optics	12:10-14:00	Spatiotemporal dynamics	11:10-13:00 Systems biology	
13:10- 14:00		Turbulence and nonlinear phenomena in fluids	11:40-13:30	13:10-14:00 Nonlinear photonics	
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
15:30 - 17:20		Non equilibrium collective phenomena		Quantum transport and quantum noise	

Feb 24-28

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00- 10:50	9:00-10:50 Information theory	9:00-10:50 Collective phenomena in social dynamics	Statistical physics in biological systems 9:30-11:20		
11:10- 13:00	11:10-13:00 Quantum physics for complex systems	11:10-13:00 Quantum physics for complex systems	11:40-13:30 Quantum physics for complex	11:10-13:00 Systems biology	
13:10- 14:00			systems	13:10-14:00 Nonlinear photonics	
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
15:30 - 17:20		Non equilibrium collective phenomena		Quantum transport and quantum noise	

Mar 2-6

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00- 10:50	9:00-10:50 Information theory	9:00-10:50 Modeling and dynamics of neural systems	9:00-10:50 Information theory	9:00-10:50 Information theory	Collective phenomena in social dynamics
					9:30-11:20
	11.10 12.00	11:10-12:00 Quantum			
11:10- 13:00	Quantum and nonlinear optics	physics for complex systems 12:10-14:00 Turbulence	Spatiotemporal dynamics 11:40-13:30	11:10-13:00 Systems biology	11:40-13:30 Information theory
13:10- 14:00		and nonlinear		13:10-14:00	

		phenomena in		Nonlinear photonics	
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
15:30 - 17:20		Non equilibrium collective phenomena		Quantum transport and quantum noise	

Mar 9-13

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00- 10:50	9:00-10:50 Information theory	9:00-10:50 Nonlinear photonics	Statistical physics in biological systems	9:00-10:50 Modeling and dynamics of neural systems	Collective phenomena in social dynamics
			9:30-11:20		9:30-11:20
	11.10 12.00	11:10-12:00 Quantum			
11:10- 13:00	11:10-13:00 Quantum and nonlinear optics	physics for complex systems	Spatiotemporal	11:10-13:00 Systems biology	Quantum physics for
		12:10-14:00	11:40-13:30		systems
		Turbulence and nonlinear		13:10-14:00	11:40-13:30
13:10- 14:00	0	phenomena in fluids		Nonlinear photonics	
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
15:30 - 17:20		Non equilibrium collective phenomena		Quantum transport and quantum noise	

Mar 16-20

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00- 10:50	9:00-10:50 Information theory	9:00-10:50 Collective phenomena in social	Statistical physics in biological	9:00-10:50 Modeling and dynamics of neural systems	Collective phenomena in social
		dynamics	systems		dynamics

			9:30-11:20		9:30-11:20
	11:10-13:00	11:10-12:00 Quantum			
11:10- 13:00	Quantum and nonlinear optics	physics for complex systems	Spatiotemporal dynamics	11:10-13:00 Systems biology	Quantum physics for complex
		Turbulence	11.40 13.50	13.10-14.00	11:40-13:30
13:10- 14:00	13:10- 14:00	phenomena in fluids		Nonlinear photonics	
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
15:30 - 17:20		Non equilibrium collective phenomena		Quantum transport and quantum noise	

Mar 23-27

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00- 10:50	9:00-10:50 Information theory	9:00-10:50 Collective phenomena in social dynamics	Statistical physics in biological systems 9:30-11:20	9:00-10:50 Modeling and dynamics of neural systems	Collective phenomena in social dynamics 9:30-11:20
	11.10.10.00	11:10-12:00 Quantum			
11:10- 13:00	11:10-13:00 Quantum and nonlinear	physics for complex systems	Spatiotemporal	11:10-13:00 Systems biology	Quantum physics for
	optics	12:10-14:00	dynamics 11:40-13:30		complex systems
		Turbulence and nonlinear		13:10-14:00	11:40-13:30
13:10- 14:00		phenomena in fluids		Nonlinear photonics	
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
15:30 - 17:20		Non equilibrium collective phenomena		Quantum transport and quantum noise	

Mar 30 – Apr 3

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00- 10:50	9:00-10:50 Information theory	9:00-10:50 Collective phenomena in social dynamics	Statistical physics in biological systems 9:30-11:20	9:00-10:50 Modeling and dynamics of neural systems	Collective phenomena in social dynamics 9:30-11:20
		11:10-12:00 Quantum			
11:10- 13:00	Quantum and nonlinear optics	physics for complex systems	Spatiotemporal	11:10-13:00 Systems biology	Quantum physics for
		12:10-14:00 Turbulence	11:40-13:30		systems 11:40-13:30
13:10- 14:00		and nonlinear phenomena in fluids		13:10-14:00 Nonlinear photonics	
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
15:30 - 17:20		Non equilibrium collective phenomena		Quantum transport and quantum noise	

Apr 6-8

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00- 10:50		9:00-10:50 Nonlinear photonics	Statistical physics in biological systems	9:00-10:50 Modeling and dynamics of neural systems	
			9:30-11:20		
	11.10 12.00	11:10-12:00 Quantum			
11:10- 13:00	Quantum and nonlinear optics	physics for complex systems	Spatiotemporal dynamics 11:40-13:30	11:10-13:00 Systems biology	Quantum physics for
		12:10-14:00 Turbulence and nonlinear			complex systems 11:40-13:30

12:10				13:10-14:00	
13:10-		nhonomona in		Nonlinear	
14.00		fluide		photonics	
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
		Non		Quantum	
15:30 -		equilibrium		transport and	
17:20		collective		quantum	
		phenomena		noise	

Apr 20 -24

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00- 10:50		9:00-10:50 Nonlinear photonics	Statistical physics in biological systems	9:00-10:50 Modeling and dynamics of neural systems	
			9:30-11:20 Spatiotemporal dynamics 11:40-13:30		
	11.10-13.00	11:10-12:00 Quantum			
11:10- 13:00	Quantum and nonlinear	physics for complex systems	Spatiotemporal	11:10-13:00 Systems biology	Quantum physics for
	optice	12:10-14:00	dynamics 11:40-13:30		complex systems
10.10		Turbulence and nonlinear		13:10-14:00	11:40-13:30
13:10- 14:00		phenomena in fluids		Nonlinear photonics	
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
15:30 - 17:20		Non equilibrium collective phenomena		Quantum transport and quantum noise	

Apr 27 - 30

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00-		9:00-10:50	9:00-10:50	9:00-10:50	
10:50		Modeling and	Modeling and	Modeling and	
		dynamics of	dynamics of	dynamics of	
		neural systems	neural systems	neural systems	

11:10- 13:00	11:10-13:00 Quantum and nonlinear optics	11:10-12:00 Quantum physics for complex systems 12:10-14:00	Spatiotemporal dynamics 11:40-13:30	11:10-13:00 Systems biology	Quantum physics for complex systems
13:10- 14:00		Turbulence and nonlinear phenomena in fluids		13:10-14:00 Nonlinear photonics	11:40-13:30
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
15:30 - 17:20		Non equilibrium collective phenomena		Quantum transport and quantum noise	

May 4 - 8

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00- 10:50		9:00-10:50 Nonlinear photonics	Statistical physics in biological systems	9:00-10:50 Modeling and dynamics of neural systems	
			9:30-11:20		
11:10- 13:00	11:10-13:00 Quantum and nonlinear	11:10-12:00 Quantum physics for complex		11:10-13:00 Systems	Quantum
	optics	systems 12:10-14:00	dynamics 11:40-13:30	biology	physics for complex systems
13:10- 14:00		and nonlinear phenomena in fluids		13:10-14:00 Nonlinear photonics	11:40-13:30
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY

15:30 - 17:20			

May 11 - 15

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00- 10:50		9:00-10:50 Nonlinear photonics			
		11:10-12:00 Quantum			
11:10- 13:00		physics for complex systems			Quantum physics for complex systems
				13:10-14:00	11:40-13:30
13:10- 14:00				Nonlinear photonics	
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
15:30 - 17:20					

May 18 - 22

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00- 10:50		9:00-10:50 Nonlinear photonics			
11:10- 13:00		11:10-12:00			

		Quantum physics for complex systems		13:10-14:00	Quantum physics for complex systems 11:40-13:30
13:10- 14:00				Nonlinear photonics	
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
15:30 - 17:20					

Exam period: May 25 – June 12. Extraordinary exam period: June 15-19