

Program of the School for young scientists
Interaction of Radiation with Quantum Devices (IRQ-2017)

Time	Kind of event	Lecturer/ Speaker	Title/ Comments
Day 1: 27-11 Monday			
9.15-9.45	Registration		
9:45-10:00	Introduction to school	Teunis Klapwijk	Instructions for groups Idea of the school
10:00-10:40	Lecture a1	Denis Sych	'Quantum properties of light'
10:45-11:25	Lecture a2		
11.25-11.45	Coffee break		
11.45-12.25	Lecture b1	Teunis Klapwijk	'Mesoscopic and nonequilibrium superconductivity'
12.30-13.10	Lecture b2		
13.10-14.10	Lunch		
14.10-15.30	Preparation discussion		Time for discussions on research papers
15.30-16.10	Seminar	Denis Vodolazov	'Theory of single photon detection by 'dirty' current-carrying superconducting strip'
16.15-16.55	Seminar	Vadim Kovalyuk	'Hybrid nanophotonic-superconducting approach for integrated quantum-photonic circuits implementation'
Day 2: 28-11 Tuesday			
10:00-10:40	Lecture e1	Yulia Korneeva	'Micro- and nanoscale patterning'
10:45-11:25	Lecture e2	Anna Kardakova	'Device technology for experimentalists: thin films deposition methods'
11.25-11.45	Coffee break		
11.45-12.25	Lecture a3	Denis Sych	'Quantum properties of light'
12.30-13.10	Lecture a4		
13.10-14.10	Lunch		
14.10-15.30	Preparation discussion		Time for discussions on research papers
15.30-16.15	Seminar on papers	Group A (Papers a)	
16.15-18.15	Excursions to the Lab and the clean-room		
Day 3: 29-11 Wednesday			
10:00-10:40	Lecture b3	Teunis Klapwijk	'Mesoscopic and nonequilibrium superconductivity'
10:45-11:25	Lecture b4		
11.25-11.45	Coffee break		
11.45-12.25	Lecture c1	Georgy Fedorov	'Electronic properties of carbon nanotubes'
12.30-13.10	Lecture c2		

13.10-14.10	Lunch		
14.10-15.30	Preparation discussion		Time for discussions on research papers
15.30-16.15	Seminar on papers	Group B (Papers b)	
16.20-17.00	Seminar	Irina Bobkova	'Magnetoelectric effects in heterostructures S/3D TI'
17.05-17.45	Seminar	Konstantin Tikhonov	'Electron-phonon interactions in graphene: dephasing and heat transfer'
Day 4: 30-11 Thursday			
10:00-10:40	Lecture d1	Dmitry Bagrets	'Majorana fermions in topological superconductors'
10:45-11:25	Lecture d2		
11.25-11.45	Coffee break		
11.45-12.25	Seminar	Artem Kononov	'Andreev reflection at a single superconducting junction to a 3D topological insulator Bi₂Te₃'
12.30-13.10	Poster session		Posters with forerunning flash-presentations
13.10-14.10	Lunch		
14.10-15.30	Preparation discussion		Time for discussions on research papers
15.30-16.15	Seminar on papers	Group C (Papers c)	
16.20-17.50	Social hour		Party with drinks
Day 5: 01-12 Friday			
10:00-10:40	Lecture c3	Francesco Rossella	'Hybrid device architectures based on III-V semiconductor nanowires: design, fabrication, functionalities'
10:45-11:25	Lecture c4		
11.25-11.45	Coffee break		
11.45-12.25	Lecture d3	Vadim Khrapai	'Electronic transport as a random process'
12.30-13.10	Lecture d4		
13.10-14.10	Lunch		
14.10-15.30	Preparation discussion		Time for discussions on research papers
15.30-16.15	Seminar on papers	Group D (Papers d)	
16.20-17.00	Seminar	Dmitry Svintsov	'Theory of terahertz photoresponse in graphene field-effect transistors'
17.00-17.20	School closure		Delivery of participant certificates
17.20-17.30	Group photo		