

Focus Semester on Quantum Information

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	26 Sept	27 Sept	28 Sept	29 Sept	30 Sept
		Introduction to open quantum systems I	Introduction to Mathematical Foundations of QIT II		Introduction to Quantum Algorithms II
8:30-10:00		Giovanna Morigi	Jason Crann		Michael Walter
		Lecture hall 003, E1 3	Lecture hall 003, E1 3		Lecture hall 003, E1 3
		Introduction to Mathematical Foundations of QIT I	Control of open quantum systems I	Control of open quantum systems II	Control of open quantum systems III
10:15-12:00		Jason Crann	Christiane Koch	Christiane Koch	Christiane Koch
		Lecture hall 003, E1 3	Lecture hall 003, E1 3	Lecture hall 003, E1 3	Lecture hall 003, E1 3
12:15-14:00					
	Opening Event	Introduction to open quantum systems II		Introduction to Quantum Algorithms I	
14:15-16:00	Starting at 14:00	Giovanna Morigi		Michael Walter	
	incl. talk by Tommaso Calarco	Lecture hall 002, E1 3		Lecture hall I, E2 5	
	Günter Hotz lecture hall, E2 2				
16:15-18:00	(with reception afterwards)				

Focus Semester on Quantum Information

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 2	3 Oct	4 Oct	5 Oct	6 Oct	7 Oct
8:30-10:00	Public holiday				
10:15-12:00		Introduction to Mathematical Foundations of QIT III Jason Crann Lecture hall 003, E1 3		Introduction to Mathematical Foundations of QIT V Jason Crann Lecture hall 003, E1 3	Introduction to Quantum Algorithms V Jonas Helsen Lecture hall 003, E1 3
12:15-14:00					
14:15-16:00		Introduction to Quantum Algorithms III Jonas Helsen Lecture hall III, E2 5	Introduction to Mathematical Foundations of QIT IV Jason Crann Lecture hall III, E2 5	Introduction to Quantum Algorithms IV Jonas Helsen Lecture hall III, E2 5	
16:15-18:00		Quantum Cake From 16:00			
			Public talk (in German) Quantum Tech series, „Quantenmathematik“ by Moritz Weber, at 18:30, Filmhaus Saarbrücken		

Focus Semester on Quantum Information

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 3	10 Oct	11 Oct	12 Oct	13 Oct	14 Oct
		Introduction to OSCAR	Introduction to OSCAR	Introduction to OSCAR	
8:30-10:00		NN	NN	NN	
	Lecture hall III, E2 5	Lecture hall 003, E1 3	Lecture hall III, E2 5	Lecture hall III, E2 5	
		Introduction to OSCAR	Introduction to OSCAR	Introduction to OSCAR	
10:15-12:00		NN	NN	NN	
	Lecture hall III, E2 5	Lecture hall 003, E1 3	Lecture hall III, E2 5	Lecture hall III, E2 5	
	Workshop Introduction into the computer algebra system OSCAR	Introduction to OSCAR	Introduction to OSCAR	Introduction to OSCAR	
12:15-14:00	Welcome at 13:00	NN	NN	NN	
	Lecture hall III, E2 5	Lecture hall III, E2 5 (from 13:00)	Lecture hall III, E2 5	Lecture hall III, E2 5	
		Introduction to OSCAR	Introduction to OSCAR	Introduction to OSCAR	
14:15-16:00	Quantum Cake	NN	NN	NN	
	From 15:00	Lecture hall III, E2 5	Lecture hall III, E2 5	Lecture hall III, E2 5	
	Saarbrücken-Jülich Colloquium on Quantum Information	Introduction to OSCAR	Introduction to OSCAR	Introduction to OSCAR	
16:15-18:00	from 16:00 until 17:00	NN	NN	NN	
		Lecture hall III, E2 5	Lecture hall III, E2 5	Lecture hall III, E2 5	
			Public talk (in German) Quantum Tech series, from 18:30, Filmhaus Saarbrücken		
	See here for the program of the OSCAR workshop:				
	https://oscar.computeralgebra.de/meetings/2022-10/program/				

Focus Semester on Quantum Information

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 4	17 Oct	18 Oct	19 Oct	20 Oct	21 Oct
8:30-10:00					
10:15-12:00		How to compute with quantum walks I Vivien Kendon Lecture hall 003, E1 3	How to compute with quantum walks II Vivien Kendon Lecture hall III, E2 5	Quantum many-body open systems III Rosario Fazio Lecture hall 003, E1 3	
12:15-14:00					
14:15-16:00	Quantum Cake From 15:00	Quantum many-body open systems I Rosario Fazio Lecture hall III, E2 5	Quantum many-body open systems II Rosario Fazio Lecture hall III, E2 5		
16:15-18:00	Saarbrücken-Jülich Colloquium on Quantum Information from 16:00 until 17:00	Women in QIT discussion with Vivien Kendon from 17:00 Lecture Hall IV, E2 4			

Focus Semester on Quantum Information

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 5	24 Oct	25 Oct	26 Oct	27 Oct	28 Oct
			Device-independent quantum information processing II		Quantum Physics and statistical physics
8:30-10:00			Antonio Acin		Giovanna Morigi
			Lecture hall II, E2 5		lecture hall 1.03, A5 1
		Quantum Cryptography I		Quantum Cryptography II	Quantum Cryptography III
10:15-12:00		Anne Broadbent		Anne Broadbent	Anne Broadbent
		Lecture hall 003, E1 3		Lecture hall II, E2 5	Lecture hall 003, E1 3
	Introduction to Quantum Computing				Introduction to Quantum Computing
12:15-14:00	Frank Wilhelm-Mauch				Frank Wilhelm-Mauch
	Seminar room E.04, E2 6				Seminar room E.04, E2 6
		Device-independent quantum information processing I		Quantum Physics and statistical physics	
14:15-16:00	Quantum Cake	Antonio Acin		Giovanna Morigi	
	From 15:00	Lecture hall II, E2 5		Large lecture hall of physics	
	Saarbrücken-Jülich Colloquium on Quantum Information		Students seminar on quantum information		
16:15-18:00	from 16:00 until 17:00	Women in QIT meeting	Organized by Pierre Botteron		
		from 17:00	Seminar room 2, E2 5		
		Conference room, ground floor, E2 4	Public talk (in German) Quantum Tech series, from 18:30, Filmhaus Saarbrücken		

Focus Semester on Quantum Information

	Monday	Tuesday	Wednesday	Thursday		Friday
Week 6	31 Oct	1 Nov	2 Nov	3 Nov		4 Nov
				Minimum Output Entropy II		Quantum Physics and statistical physics
8:30-10:00		Public holiday		Benoit Collins		Giovanna Morigi
				Lecture hall 003, E1 3		lecture hall 1.03, A5 1
				A tensor norm approach to quantum entanglement II		Minimum Output Entropy III
10:15-12:00				Ion Nechita		Benoit Collins
				Lecture hall II, E2 5		Lecture hall 003, E1 3
	Introduction to Quantum Computing		A tensor norm approach to quantum entanglement I			Introduction to Quantum Computing
12:15-14:00	Frank Wilhelm-Mauch		Ion Nechita			Frank Wilhelm-Mauch
	Seminar room E.04, E2 6		Lecture hall I, E2 5			Seminar room E.04, E2 6
			Minimum Output Entropy I	A tensor norm approach to quantum entanglement III	Quantum Physics and statistical physics	
14:15-16:00	no quantum cake		Benoit Collins	Ion Nechita	Giovanna Morigi	
	this week		Lecture hall II, E2 5 (starting at 14:30)	Lecture hall II, E2 5	Large lecture hall of physics	
	Saarbrücken-Jülich Colloquium on Quantum Information		Students seminar on quantum information			
16:15-18:00	from 16:00 until 17:00		Organized by Pierre Botteron			
			Seminar room 2, E2 5			

Focus Semester on Quantum Information

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 7	7 Nov	8 Nov	9 Nov	10 Nov	11 Nov
					Quantum Physics and statistical physics
8:30-10:00					Giovanna Morigi lecture hall 1.03, A5 1
		Quantum error corrections II			Security of quantum key distributions II
10:15-12:00		Barbara Terhal Lecture hall 003, E1 3			Glaucia Murta Lecture hall 003, E1 3
	Introduction to Quantum Computing		Security of quantum key distributions I		Introduction to Quantum Computing
12:15-14:00	Frank Wilhelm-Mauch Seminar room E.04, E2 6		Glaucia Murta Lecture hall I, E2 5		Frank Wilhelm-Mauch Seminar room E.04, E2 6
	Quantum error corrections I	Topological quantum computing I	Topological quantum computing II	Topological quantum computing III	Quantum Physics and statistical physics
14:15-16:00	Barbara Terhal Lecture hall II, E2 5 (from 14:00-15:30) Quantum Cake From 15:30	Eric Rowell Lecture hall II, E2 5	Eric Rowell Lecture hall II, E2 5	Eric Rowell Lecture hall II, E2 5	Giovanna Morigi Large lecture hall of physics
	Saarbrücken-Jülich Colloquium on Quantum Information		Students seminar on quantum information		
16:15-18:00	from 16:00 until 17:00		Organized by Pierre Botteron Seminar room 2, E2 5		

Focus Semester on Quantum Information

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 8	14 Nov	15 Nov	16 Nov	17 Nov	18 Nov
		Graph Based Nonlocal Games I	Graph Based Nonlocal Games II	Graph Based Nonlocal Games IV	Quantum Physics and statistical physics
8:30-10:00		David Roberson	David Roberson	David Roberson	Giovanna Morigi
		Lecture hall 003, E1 3	Lecture hall II, E2 5	Lecture hall 003, E1 3	lecture hall 1.03, A5 1
		10:00-11:00: Hua Wang (003, E1 3)	10:00-11:00: Mateusz Wasilewski (seminar room 9, E2 4)	10:00-11:00: Adam Skalski (lecture hall II, E2 5)	Security of quantum key distributions V
10:15-12:00		11:00-12:00: Daniel Gromada (003, E1 3)	11:00-12:00: Moritz Weber (seminar room 9, E2 4)	11:00-12:00: Nicolas Faroß (lecture hall II, E2 5)	Glauca Murta
					Lecture hall 003, E1 3
	Introduction to Quantum Computing	12:00-13:00: Michael Brannan (Seminar room 6, E2 4)	12:00-13:00: Malte Gerhold (lecture hall I, E2 5)	12:00-13:00: Roberto Palomares (lecture hall II, E2 5)	Introduction to Quantum Computing
12:15-14:00	Frank Wilhelm-Mauch				Frank Wilhelm-Mauch
	Seminar room E.04, E2 6				Seminar room E.04, E2 6
	Security of quantum key distributions III	Nonlocality and Self-Testing I	Graph Based Nonlocal Games III	Nonlocality and Self-Testing II	Quantum Physics and statistical physics
14:15-16:00	Glauca Murta	Laura Mancinska	David Roberson	Laura Mancinska	Giovanna Morigi
	Lecture hall II, E2 5 (from 14:00-15:30)	Lecture hall II, E2 5	Lecture hall II, E2 5	Lecture hall II, E2 5	Large lecture hall of physics
	Quantum Cake	Security of quantum key distributions IV	Students seminar on quantum information		
16:15-18:00	From 15:30 in the foyer of E2 4	Glauca Murta	Organized by Pierre Botteron		
	Saarbrücken-Jülich Colloquium on Quantum Information	Lecture hall II, E2 5	Seminar room 2, E2 5		
	from 16:00 until 17:00				
	Women in Quantum Information				
	From 17:00 Meeting with Glauca Murta and Laura Mancinska (tbc)				

Focus Semester on Quantum Information

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 9	21 Nov	22 Nov	23 Nov	24 Nov	25 Nov
					Quantum Physics and statistical physics
8:30-10:00					Giovanna Morigi
		Security of quantum key distributions VII		Quantum Symmetries of graph games III	Women in QIT Workshop
10:15-12:00		Glaucia Murta		Simon Schmidt	Escape the super woman trap
		Lecture hall 003, E1 3		Lecture hall II, E2 5	9:30-17:30, Seminar room 3, E2 5
	Introduction to Quantum Computing				Introduction to Quantum Computing
12:15-14:00	Frank Wilhelm-Mauch				Frank Wilhelm-Mauch
	Seminar room E.04, E2 6				Seminar room E.04, E2 6
	Security of quantum key distributions VI	Quantum Symmetries of graph games I	Quantum Symmetries of graph games II	Quantum Physics and statistical physics	
14:15-16:00	Glaucia Murta	Simon Schmidt	Simon Schmidt	Giovanna Morigi	
	Lecture hall II, E2 5 (from 14:00-15:30)	Lecture hall II, E2 5	Lecture hall II, E2 5		
	Quantum Cake		Students seminar on quantum information		
16:15-18:00	From 15:30		Organized by Pierre Botteron		
	Saarbrücken-Jülich Colloquium on Quantum Information		Seminar room 2, E2 5		
	from 16:00 until 17:00				

Focus Semester on Quantum Information

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 10	28 Nov	29 Nov	30 Nov	1 Dec	2 Dec
				Quantum info in the lab - quantum repeaters and how to realize them in the lab	Quantum Physics and statistical physics
8:30-10:00				Christoph Becher	Giovanna Morigi
				Lecture hall 003, E1 3	
		Tensor Networks I		Women in QIT Workshop	
10:15-12:00		Simone Montagero		Negotiations and convincing	
		Lecture hall 003, E1 3		10:00-17:00, Graduate Center, C9 3	
	Introduction to Quantum Computing				Introduction to Quantum Computing
12:15-14:00	Frank Wilhelm-Mauch				Frank Wilhelm-Mauch
	Seminar room E.04, E2 6				Seminar room E.04, E2 6
		Tensor Networks II	Reinforcement learning for quantum control	Quantum Physics and statistical physics	
14:15-16:00	Quantum Cake	Simone Montagero	Luigi Giannelli	Giovanna Morigi	
	From 15:00	Lecture hall II, E2 5	Lecture hall II, E2 5		
	Saarbrücken-Jülich Colloquium on Quantum Information		Students seminar on quantum information		
16:15-18:00	from 16:00 until 17:00		Organized by Pierre Botteron		
			Seminar room 2, E2 5		

Focus Semester on Quantum Information

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 11	5 Dec	6 Dec	7 Dec	8 Dec	9 Dec
9:00-9:45	Welcome (with coffee)	Dagmar Bruß	Sabrina Maniscalco	Sevag Gharibian	Vivien Kendon
	From 9:00	Lecture hall 003, E1 3	Zoom	Lecture Hall II, E2 5	Lecture Hall IV, E2 4
	in the foyer of E2 4				
9:45-10:30		Frank Wilhelm-Mauch	Matthias Christandl	Vladislav Golyanik	Sofia Vallecorsa
	Begin of the workshop at 10:00	Lecture hall 003, E1 3	Zoom	Lecture Hall II, E2 5	Lecture Hall IV, E2 4
	First talk at 10:15				
10:30-11:00	Harry Buhrman	Coffee break	Coffee break	Coffee break	Coffee break
	Lecture Hall II, E2 5				
11:00-11:45	Felix Motzoi	Tobias Stollenwerk	Cecilia Lancien	Michael Hartmann	Antonio Macaluso
	Lecture Hall II, E2 5	Lecture hall 003, E1 3	Zoom	Lecture Hall II, E2 5	Lecture Hall IV, E2 4
11:45-12:30	Matteo Rizzi	Jonas Helsen		Renato Renner	Closing Session
	Lecture Hall II, E2 5	Zoom (+ no lecture hall)		Lecture Hall II, E2 5	
12:30-14:00	Lunch break	Lunch break	Lunch break	Lunch break	Lunch break
14:00-14:45	Jürgen Eschner	Andreas Osterloh	Excursion	Ferdinand Schmidt-Kaler	
	Lecture Hall II, E2 5	Lecture Hall II, E2 5		Lecture Hall II, E2 5	
14:45-15:30	Lorenzo Piroli	Andreas Wallraff	Excursion		
	Lecture Hall II, E2 5	Zoom + Lecture Hall II, E2 5			
15:30-16:00	Coffee break	Coffee break	Excursion	Coffee break	Coffee break
16:00-16:45	Timo Felser	Peter Orth	Excursion	Ivan Todorov	
	Lecture Hall II, E2 5	Zoom + Lecture Hall II, E2 5		Zoom + Lecture Hall II, E2 5	
