

UNIVERSITY TEACHING

National University of Singapore

2020	Bell nonlocality (QT5201T)
2019-21	Quantum Mechanics I (PC2130)
2018	Special Topics in Physics: Bell nonlocality (PC5239)
2016-17	Quantum mechanics 2 (PC3130), new syllabus.
2015-16	Quantum mechanics 2 (PC3130).
2014	Unpredictable? Randomness, chance and free will. Coursera platform: one of the three first MOOCs selected for NUS.
2012-2013	Quantum measurement and statistics (QT5101). Newly designed module. The core of the lecture notes has been published: Acta Physica Slovaca 62 , 347 (2012).
2009-2011	Quantum optics (PC4246). Developed a full new set of lecture notes.
2009	Les Houches school of physics in Singapore: six lectures (part of QT5201B).
2009	Seminar in quantum information (QT5198).
2008-2009	Quantum Mechanics I (PC2130).

University of Geneva

2000-2006	Mécanique Quantique I et II (prof. N. Gisin): part of the lectures, tutorials, exams
2004	Troisième Cycle de la Physique en Suisse Romande, Communications Quantiques: two lectures.

Ecole Polytechnique Fédérale de Lausanne

1997-2000	Electrodynamique et optique quantiques (Dr F. Reuse): tutorials
1996-1997	Travaux Pratiques Avancés (Dr C. Dimitropoulos): NMR laboratory
1995-1996	Physique Générale (prof. J.-L. Martin): tutorials

GRADUATE STUDENTS

These are the people I have supervised directly. I have been in the jury of several theses in NUS and in many other universities, but I don't think it necessary to record those here.

Year	Candidate	Degree	Institution	Remarks
	Peter SIDAJAYA	Ph.D.	NU Singapore	
	MENG Shuyang	Ph.D.	NU Singapore	
	ZAW Lin Htoo	Ph.D.	NU Singapore	
	Clive AW	Ph.D.	NU Singapore	
	Pooja JAYACHANDRAN	Ph.D.	NU Singapore	
	Angeline SHU	Ph.D.	NU Singapore	
2020	Stella SEAH	Ph.D.	NU Singapore	Next: Post-doc, Uni Geneva
2018	TEO Wei Xin	M.Sc.	NU Singapore	Next: Ph.D. NUS Physics
2018	GOH Koon Tong	Ph.D.	NU Singapore	Next: Post-doc, ECE NUS
2017	Alexandre ROULET	Ph.D.	NU Singapore	Next: Post-doc, Uni Basel
2016	WU Xingyao	Ph.D.	NU Singapore	Next: Post-doc, Maryland
2016	Ernest TAN	M.Sc.	NU Singapore	Next: Ph.D. ETH Zurich
2015	CAI Yu	Ph.D.	NU Singapore	Next: Post-doc, my group
2015	LE Phuc Thinh	Ph.D.	NU Singapore	Next: Post-doc, TU Delft
2014	YANG Tzyh Haur	Ph.D.	NU Singapore	Next: working for DBS Bank Ltd
2014	Colin TEO Zhi Wei	Ph.D.	NU Singapore	Next: Post-doc, Innsbruck
2013	Rafael RABELO	Ph.D.	NU Singapore	Next: Post-doc, Belo Horizonte

2013	WANG Yimin	Ph.D.	NU Singapore	Next: Post-doc, Nanjing
2011	Melvyn HO Hui Kiat	M.Sc.	NU Singapore	Next: Ph.D., Basel
2009	Cyril BRANCIARD*	Ph.D.	Univ. Geneva	Next: Post-doc, U Queensland
2007	Nicolas BRUNNER*	Ph.D.	Univ. Geneva	Next: Post-doc, U Bristol

* Official supervisor: N. Gisin; my role: post-doc directly in charge

UNDERGRADUATE STUDENTS (1): END OF STUDY PROJECT (HONORS, OR M.Sc. FOR EUROPE)

Year	Candidate	Institution	Remarks
2021	Peter SIDAJAYA	NU Singapore	
2021	Zestin TAY	NU Singapore	
2020	James Asikin CHEUNG	NU Singapore	
2020	SOH Chee Wei	NU Singapore	
2019	Clive AW	NU Singapore	Results led to publication in Proceedings
2018	Joshua LEONG	NU Singapore	Results led to publication in PRE
2018	LEE Zhi Xian	NU Singapore	
2018	TEO Wei Xin	NU Singapore	
2017	Benjamin GOH	NU Singapore	
2017	Ignatius William Primaatmaja	NU Singapore	Next: Ph.D., NUS
2016	CONG Wan	NU Singapore	Next: M.Sc. Cambirdge University
2015	Pierre-Olivier GUIMOND ³	EPF Lausanne	Next: Ph.D. in Innsbruck University
2014	GOH Koon Tong	NU Singapore	
2014	ZHU Feiyu	NU Singapore	
2014	Priscilla MARIANI	NU Singapore	
2013	Jeysthur ANG Ther Wey	NU Singapore	Outstanding Undergraduate Research Prize
2013	Navneeth RAMAKRISHNAN	NU Singapore	
2013	Isaac SCHROEDER	NU Singapore	
2012	ZHANG Zhang	NU Singapore	Next: Ph.D. in Stanford University
2012	LAW Yun Zhi	NU Singapore	Results led to publication in PRL
2011	CAI Yu	NU Singapore	
2011	HAW Jing Yan	NU Singapore	Next: Ph.D. in ANU Canberra
2011	LE Phuc Thinh	NU Singapore	Outstanding Undergraduate Research Prize; Results lead to publication in IJQI
2010	Charles LIM Ci Wen	NU Singapore	Next: Ph.D. in University of Geneva
2010	Colin TEO Zhi Wei	NU Singapore	Results led to publication in Opt. Comm.
2009	Raymond CAI Yong Qin	NU Singapore	Results led to publication in New J. Phys.
2009	Charles-Edouard BARDYN ⁴	EPF Lausanne	Results led to publication in PRA
2009	Aurélien FRAGNIERE ³	EPF Lausanne	
2009	Alexandre FETE ³	EPF Lausanne	
2004	Cyril BRANCIARD ²	ENST Paris	
2004	Armand NIEDERBERGER ^{2,3}	EPF Lausanne	Results led to publication in PRA
2003	Nicolas BRUNNER ²	Univ. Geneva	Results led to publication in PRL
2000	Alo LO ¹	EPF Lausanne	
1999	Hugues DE RIEDMATTEN ¹	EPF Lausanne	Since 2012: Faculty, ICFO Barcelona

Official supervisors, co-supervisors: ¹ J.-P. Ansermet, ² N. Gisin, ³ M.A. Dupertuis, ⁴ D. Ivanov

UNDERGRADUATE STUDENTS (2): INTERMEDIATE PROJECTS

AY	Type of project	Student(s)
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2020/21	UROPS	Eugene KOH, Rahul ARVIND (3000), CHUA Wei Hong (2000)
2019/20	UROPS	Zestin TAY (3000); Thormund TAY and KONG Ling Da (2000)
2018/19	UROPS 2000	FU Xiaozhen
2016/17	UROPS 3000	XIE Yanyou, LEE Zhi Xian, Joshua LEONG, Kelvin KOOR
2015/16	UROPS 3000	Ignatius William PRIMAAATMAJA
2014/15	UROPS 3000	DAI Kun Lun
2014/15	SPS Project	TEO Wei Xin, YEO Zhen Yuan, CHOW Chang Hoong
2013/14	UROPS 3000	Kelvin HORIA
2012/13	UROPS 3000	ZHU Feiyu, GOH Koon Tong, NGUYEN Duy Quang
2011/12	UROPS 3000	Jeysthur ANG
2011/12	SP2172 (SPS project)	WANG Sihao, SOH Rong'en, WU Shuang
2010/11	UROPS 3000	NG Xin Zhao, LAW Yun Zhi, ZHANG Zhang
2010/11	ISM	Raymond SANTOSO
2010/11	SP2172 (SPS project)	Two groups: Sandoko KOSEN, Vishnu VARDHAN; DO Thi Xuan Hung, Benjamin PHUAH, SEAH Wei Ling (co-supervised by Stephanie Wehner)
2009/10	UROPS 3000	CAI Yu, HAW Jing Yan, Luigi LAUREL
2008/09	UROPS 3000	Charles LIM Ci Wen
2007/08	UROPS 3000	Raymond CAI Yong Qin

OUTREACH (HIGHLIGHTS)

My outreach activity regularly includes talks to popular audiences and schools, interviews in media and scientific journals, contributions to research highlights in institutional websites. This list contains only a few selected items.

- 2019 Op-ed in The Strait Times, Sat 26.10: Why you should care about quantum physics
- 2015-8 Helped in the Q-camp organized at CQT for junior college students.
- 2014 I have taught one of the two first Coursera modules proposed by NUS, which went online in January-February 2014. Cf. teaching section above.
- 2011 Start the blog Spreadquantum (<http://spreadquantum.wordpress.com/>), dealing with opinions on current research and advice for colleagues and students.
- 2010 Organization of a teacher workshop in CQT on quantum physics, for high school teachers, under a scheme of the Singapore Ministry of Education.
- 2010 Publication of Six quantum pieces, a textbook introducing quantum physics at a high school level, written with two senior high school students. Translations have appeared since, cf. list of publications.
- 2008 Head of the outreach committee of the recently established CQT. In this capacity, I coordinated outreach to schools in Singapore, some public event, the highlights in the CQT webpage... In 2011, I handed the coordination over to Jenny Hogan, who had been hired a full-time outreach manager.
- 2003 Publication of my popular book *Initiation a la physique quantique* in French, originating from talks on quantum physics given in several schools in Switzerland. The English edition of a revised text appears in 2006 with the title Quantum physics – a first encounter, with a foreword by Alain Aspect. Other translations have appeared since, cf. list of publications.