

**University of New South Wales
School of Physics
Conference Presentations 2007**

Conference Name	Location	Date	Presenters	Title
Organic and Physical Chemistry Conference	Adelaide	1 February	Simmons, M.Y.	Electron transport through STM-patterned dopants in silicon (Invited Talk)
14th National AMOS Conference	Adelaide	5-8 February	Bouya, Z., Box, G.P., Box, M.A. Radhi, M., Box, M.A., Box, G.P. Hallal, T., Box, G.P. Reyes, C, Henderson, E., Radhi, M., Box, M.A., Box, G.P.	Seasonal cycles in aerosol optical properties in Darwin Characteristics of biomass burning aerosol in Wagga Wagga during the southeast Australian bushfires of 2003 Size-resolved properties of atmospheric aerosols in Sydney and regional NSW The effects of biomass burning on the atmosphere in the Northern Territory
Australian Physics Teachers Conference		9 February	Simmons, M.Y.	Quantum entanglement and the future of quantum computing
CeNS Winter School--Nanosystems: From Quantum Devices to Biological Engines	Mauterndorf, Austria	12-16 February	Clark, R.G.	Single-atom nanoelectronics and spintronics for silicon-based qubits
American Physical Society March Meeting	Denver, USA	5 March	Simmons, M.Y.	Electron transport through STM-patterned dopants in silicon

Conference Name	Location	Date	Presenters	Title
INT Workshop on Electric Dipole Moments	Seattle, USA	19-22 March	Dzuba, V.	Violation of fundamental symmetries in atoms (Invited Talk)
			Dzuba, V.	Time and parity invariance violations in heavy atoms
Program on Fundamental Physics with Neutrons	Seattle, USA	19 March- 7 June	Dzuba, V.	Variation of fundamental constants: theory and observation (Invited Talk)
			Dzuba, V.	Search for variation of fundamental constants
EUROPLANET Strategic Workshop on Stellar Occultation Studies	Paris Observatory	27-28 April	Georgivits, G.	Detection of the Kuiper belt objects by stellar occultation
Australia Telescope Science Symposium	ATNF, Marsfield, Sydney	30 April	Jones, P	The Central Molecular Zone around Sagittarius B2
			Lo, N	Detection of Silicon Monoxide from a massive dense cold core
3rd International Symposium on Plant Neurobiology	Strbske Pleso, Slovakia	14 - 18 May	Beilby, M.J.	Action potential in charophytes (Invited talk)
			Shepherd, V.A.	From semi-conductors to the rhythms of sensitive plants: Legacy of J. C. Bose (Invited talk)
DIO-hosted Quadripartite Weapons and Space Systems Intelligence Committee Information Systems & Information Warfare Working Party Conference	Canberra	21-25 May	Clark, R.G.	Single-atom nanoelectronics and spintronics for silicon-based qubits (Invited talk)
Joint International Conference Frequency-Time-Navigation 2007	Geneva, Switzerland	28 May-1 June	Flambaum, V.	Variation of fundamental constants: theory and observation

Conference Name	Location	Date	Presenters	Title
EIPBN Conference	Denver, USA	29 May - 2 June	Füchsle, M.	Progress towards gate alignment for atomically precise STM-patterned devices
40th Silicon Symposium	Victoria, Canada	31 May-2 June	Reusch, T.C.G., Radny, M.W., Smith, P.V., Warschkow, O., Marks, N.A., Curson, N.J., McKenzie, D.R., and Simmons, M.Y.	Single dangling bonds on the silicon (001) surface: the influence of substrate doping on atomic-scale surface defects and adsorbates
			Warschkow, O., Wilson, H.F., Marks, N.A., Schofield, S.R., Curson, N.J., Radny, M.W., Smith, P.V., McKenzie, D.R., and Simmons M.Y.	The mechanism of phosphine dissociation on the silicon (001) surface

Conference Name	Location	Date	Presenters	Title
International Conference on Materials for Advanced Technologies	Singapore	1-6 June	Warschkow, O., Marks, N.A., Schofield, S.R., Curson, N.J., Reusch, T.C.B., Reid, A.S., Wilson, H.F., Radny, M.W., Smith, P.V., McKenzie, D.R., and Simmons, M.Y.	Kinetic Monte Carlo simulations of phosphorus atom placement on silicon surfaces
Quantum Nanoscience with Spins	California, USA	3-6 June	Morello, A.	Architectures and decoherence of electron spin cubits
WE-Heraeus Seminar "Atomic clocks and fundamental constants"	BadHonnet, Germany	3-8 June	Flambaum, V.	Variation of fundamental constants: theory and observation
Astronomical Society of Australia AGM 2007	Macquarie University, Sydney	3-8 June	Britton, T.	High dynamic range direct imaging of extra-solar planets with LAPCAT
Australia Telescope National Facility Student Symposium	Sydney	6 June	Chhetri, R	Searching for Gravitational lenses using the AT20G Survey
Workshop on fundamental physics with atomic clocks in space missions	Dusseldorf, Germany	11 June	Flambaum, V.	Variation of fundamental constants: theory and observation
NANTEN2 Millimetre Wave Astronomy Workshop	UNSW, Sydney	11-12 June	Jones, P. Burton, M.	The Central Molecular Zone The earliest stage of massive star formation
Silicon Nanoelectronics Workshop	Leiden, Holland	21-25 May	Simmons, M.Y.	Atomic-scale device fabrication in silicon (Invited Talk)

Conference Name	Location	Date	Presenters	Title
14th International Conference in Plant Membrane Biology	Universidad Politecnica de Valencia, Spain	26-30 June	Al Khazaaly, S., Beilby, M.J.	Modeling ion transporters at the time of hypertonic regulation in <i>Lamprothamnium</i>
			Blatt, M.R., and Beilby, M.J.	Mitochondrial sequestration of BCECF after ester loading in the giant alga, <i>Chara</i>
Korea-Sweden Global Partnership Program	Seoul, Korea	28 June	Simmons, M.Y.	Atomic-scale device fabrication in silicon (Invited Talk)
International Conference on Materials for Advanced Technologies (IMAT)	Singapore	1-6 July	Ruess, F.J.	Electronic properties of atomically controlled Si:P devices created by scanning probe microscopy (Invited Talk)
Astronomical Society of Australia AGM 2007	Macquarie University, Sydney	2-5 July	Ashley, M	Ground-layer atmospheric turbulence in Antarctica
			Burton, M. Chhetri, R	Cold cores in the Delta Quadrant Survey Searching for Gravitational lenses using the AT20G Survey
			Jones, P.	The Central Molecular Zone around Sagittarius B2
			Leslie, T.	Sky brightness, photometry and cloud statistics for Dome C, Antarctica
			Lo, N.	Detection of Silicon Monoxide from a massive dense cold core
			Storey, J	PILOT and the future of Dome C astronomy
International Conference on Nanoscience and Technology (ICN+T 2007)	Stockholm, Sweden	2-6 July	Reusch, T.	Nanoscale dopant rings in silicon patterned by STM lithography
International School of Physics "Enrico Fermi", "Atomic Optics and Space Physics"	Varenna, Italy	3-13 July	Flambaum, V.	Variation of fundamental constants: theory (3 Invited Lectures)

Conference Name	Location	Date	Presenters	Title
3rd Australian Aerosol Workshop	Aspendale	4-6 July	Radhi, M., Box, M.A., Box, G.P.	Physical, chemical and optical properties of Australian desert dust aerosols.
Electronic Properties of Two-Dimensional Electron Systems	Genova, Italy	15-20 July	Rueß, F.J.	Electronic properties of atomically controlled Si:P devices created by scanning probe microscopy
The XXIII International Conference on Photochemistry	The University of Cologne, Germany	29 July - 03 August	Wilk, K.E., Lelliot, P., Harrop, S.J., Edler, D., Curmi, P.M.G.	Cryptophyte light harvesting system
14th International Conference on Sound and Vibration	Cairns	July	Schneider, J., Smith, J., and Wolfe, J.	The 'didjeriduo': musical implications of a three-port branched duct
7th IEEE Conference on Nanotechnology	Hong Kong	2-5 August	Rueß, F.J.	Atomically controlled Si:P devices created by scanning probe microscopy (Invited Talk)

Conference Name	Location	Date	Presenters	Title
2007 Quantum Computing (QC) * Quantum Algorithms (QA) Program Review	Minneapolis, USA	12-16 August	Clark, R.G.	Towards a solid state quantum computer in silicon
			Scappucci, G. Warschkow, O., Schofield, S.R., Radny, M.W., Smith, P.V., Marks, N.A., Scappucci, G., Ratto, F., Thompson, D.L., McKenzie, D.R., and Simmons, M.Y.	STM fabrication of precision Si:P devices Towards an atomic-scale understanding of silicon dioxide gate dielectric growth
Australia-Sandia-Wisconsin Silicon Focus Workshop	Madison, USA	17 August	Scappucci, G.	STM fabrication of precision Si:P devices (Invited Talk)

Conference Name	Location	Date	Presenters	Title
14th IUAPPA Conference	Brisbane	September	Hallal, T., Box, G.P., Radhi, M., Box, M.A., Cohen, D.D., Stelcer, E.	Size-resolved properties of atmospheric aerosols in Sydney and regional NSW
			Radhi, M., Box, M.A., Mitchell, R.M., Keywood, M., Box, G.P., Campbell, S., French, D., Cohen, D.	Physical, chemical and optical properties of Australian desert dust aerosols.
19th International Conference on Acoustics	Madrid, Spain	2-7 September	Bouya,Z., Box, G.P., Box, M.A.	Seasonal cycles in aerosol optical properties in Darwin
			Chen, J-M, Laurin,D., Smith, J.,and Wolfe, J.	Vocal tract interactions in recorder performance
			Smith, J., Henrich, N., and Wolfe, J.	Resonance tuning in singing
			Wolfe, J., Tarnopolsky, A., Fletcher, N., Hollenberg, L, Lange, B., and Smith, J.	The acoustics of the player-didjeridu system
12th International COMMS Conference 2007		4 September	Clarke, W.	Atomic-scale device fabrication in silicon (Invited Talk)
Surveys for ALMA workshop, European Southern Observatory	Garching, Germany	6 September	Burton, M.	Millimetre wave astronomy in Australia

Conference Name	Location	Date	Presenters	Title
International Symposium on Music Acoustics	Barcelona, Spain	9-12 September	Chen, J-M, Smith, J., and Wolfe, J.	Vocal tract interactions in saxophone performance
			Smith, J., Rey, G., Wolfe, J.	What makes a good didjeridu?
			Wolfe, J. Wolfe, J., Henrich, N., Kiek, M., and Smith, J.	The acoustics of wind instruments Seriously loud and noticeably different: the acoustics of Bulgarian women's singing style
TECHCON 2007	Austin, USA	8-12 September	Simmons, M.Y.	Atomic-scale device fabrication in silicon (Invited Talk)
Massive Star Formation; Observations Confront Theory	Heidelberg, Germany	10-14 September	Lo, N.	Detection of Silicon Monoxide from a massive dense cold core
2nd ARENA Conference, The Science Drivers for Anarctic Astronomy		17 September	Burton, M.	From infrared site testing to twilight science
			Burton, M.	Mapping the molecular medium of the Galaxy
Workshop on Fundamental Physics with Rare Isotopes	Seattle, USA	19-21 September	Flambaum, V.	Violation of the fundamental symmetries (Invited Talk)

Conference Name	Location	Date	Presenters	Title
Nanostructures for Electronics Energy and Environment	Couran Cove, Qld	23-28 September	Scappucci, G.	Low temperature UHV-compatible silicon dioxide for gating atomically precise devices in silicon
			Simmons, M.Y.	Atomic-scale device fabrication in silicon (Invited Talk)
Gordon Godfrey Workshop on Strong Electron Correlations	University of NSW, Australia	24-27 September	Hamer, C.	The Union Jack Model
Sixth International Heidelberg conference on dark matter in astro and particle physics	Sydney University	24-28 September	Georgivits, G.	Detection of Kuiper belt objects by stellar occultation
Working on astrophysical molecular spectroscopy	Sydney University	25 September	Jones, P.	A 3-mm molecular line study of the Centre of our Galaxy
COSAC; Conference on Science and Christianity	Geelong	28-30 September	Stening, R.J.	Indeterminacy and Faith
Productive Nanosystems, Foresight Institute	Arlington, USA	9-10 October	Simmons, M.Y.	Atomic-scale device fabrication in silicon (Invited Talk)
54th American Vacuum Society Meeting	Seattle, USA	14-19 October	Clarke, W.	Nanoscale device fabrication by scanning probe microscopy
Workshop Mesoscopic and Fundamental Physics	East Lansing, USA	19-22 October	Flambaum, V.	Violation of the fundamental symmetries and variation of fundamental constants (Invited Talk)
ATNF Workshop, the Future of Parkes		5 November	Burton, M.	Parkes at 12 mm
FIR Workshop 2007	Bad Honnef, Germany	5-7 November	Jones, P.	A 3-mm molecular line survey of the central molecular zone
Astrophotonics Workshop	University of Sydney	16 November	Burton, M.	Mid-infrared astronomy-in the heat of the night
Military Communications and Information Systems	Canberra	20-22 November	Clark, R.G.	Silicon quantum computer: A decade of developing the pieces--a blueprint for their assembly

Conference Name	Location	Date	Presenters	Title
15th AINSE Conference on Nuclear and Complementary Techniques of Analysis & 10th Vacuum Society of Australia Congress	Melbourne	21-23 November	Van Beveren, L. W.	Electrically detected magnetic resonance in accumulation-layer MOSFETs
31st Annual Meeting of Australian Society for Biophysics	Newcastle	2-5 December	Al Khazaaly, S., Beilby, M.J., and Shepherd, V.A.	The effect of Ca^{2+} concentration on response to salinity stress in <i>Chara australis</i>
SPIE: Microelectronics, MEMS and Nanotechnology	Canberra	6 December	Simmons, M.Y.	Atomic-scale device fabrication in silicon (Invited Talk)
NANTEN2 Workshop	Universidad de Chile, Santiago, Chile	11 December	Burton, M.	Millimetre astronomy with Mopra

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International Conference on Music Perception Science	Sydney	December	Chen, J.-M.	Vocal tract resonances in saxophone playing
			Coote, I.	Cor anglais and alto oboe: Same or different?
			Garnier, M.	Vocal straining vs efficiency of communication
			Ghonim, A. Kulik, Y.	Sounds of world English Computer modelling of the acoustic properties of woodwind instruments for timbre and design improvement
			Wolfe, J.	Speech and music: Acoustics, signals and the relation between them (keynote speech)