



Rodinia 2017 Scientific Program



Curtin University THE INSTITUTE FOR GEOSCIENCE RESEARCH (TIGER)



MONASH University school of Earth, Atmosphere and Environment Faculty of Science



Sunday 11th June	SPEAKER	Presentation Title
	THEME 3	How supercontinents assemble
		Theme coordinator: Dr Ricardo Trindade
9:20:00 AM	Keynote: Alan Collins	A Full-Plate Global Reconstruction of the Neoproterozoic: An Essential Step in Quantifying Ancient Geodynamics
10:00:00 AM	Andrew Merdith	Kinematic Constraints on the transition from 'West' Rodinia to East Gondwana
10:20:00 AM	Feifei Zhang	Geochemical, Ar-Ar geochronological and Sr-Nd isotopic constraints on the origin of Late Mesozoic volcanic rocks from the West Qinling area in China
10:40:00 AM	Yunpeng Dong	Tectonic evolution of the East Kunlun Orogen, Northern Tibetan Plateau
11:00:00 AM	Morning tea	
11:20:00 AM	Helen McFarlane	Nascent Palaeoproterozoic episodic collisional orogenesis: The Eburnean Orogeny of the West African Craton
11:40:00 AM	Shengsi Sun	Deformation of the Songshugou ophiolite in the Qinling orogen
12:00:00 PM	Zhao Yang	Geochronologic constraints on formation and exhumation of the Foping migmatitic gneiss dome, Qinling Orogen, central China
12:20:00 PM	Discussion	
12:40:00 PM	Lunch	
	THEME 7	LIPS, Plumes, and supercontinents
		Theme coordinators: Prof. Richard Ernst, Dr Simon Jowitt
1:40:00 PM	Keynote: Richard Ernst	Precambrian Mantle Plume Centres and Breakup Margins Identified Using the Large Igneous Province Record
2:40:00 PM	Xiaohu Zhou	Dyke Swarms Distribution and Remote Sensing Images Characteristics in NE Hami, Xinjiang, China
3:00:00 PM	Afternoon tea	
3:20:00 PM	Shuguang Song	Secular breakup of Rodinia from mantle-plume activity to continental rifts to ocean basin (Northern Tibetan Plateau)
3:40:00 PM	Shihong Zhang	A Combined Geochronological and Paleomagnetic study on ~1220 Ma mafic dykes in the North China Craton and its tectonic implications
4:00:00 PM	Invited: Steven Denyszyn	Beyond the Barcode: Geochronological methods responsibly applied to supercontinent reconstructions
4:20:00 PM	Nicolas Flament	Implications of the mobility of the Perm Anomaly for tectonic reconstructions in deep geological time
4:40:00 PM	Discussion	
Evening	Keynote: Dietmar Muller	Linking plate motions to geodynamic models in deep time – a review of current obstacles and potential solutions

Monday 12th June	SPEAKER	Presentation Title
	THEME 4	New developments in Paleogeographic reconstructions: Reconstruction software; data mining; and database development. Theme coordinators: Prof. Bruce Eglington
9:00:00 AM	Keynote: David Evans	Continuous quantitative model of global paleogeography through 1.8 billion years
9:40:00 AM	Michael Tetley	A computational framework to optimise global absolute plate motion models
10:00:00 AM	Simon Williams	Open-source tools for the study of deep time plate tectonic reconstructions: a GPlates update
10:20:00 AM	Chris Spencer	A Palaeoproterozoic gap in the global geologic record
10:40:00 AM	Bruce Eglington	Achieving improved constraints for crustal evolution: the advantages of multiple, diverse datasets
11:00:00 AM	Discussion	
11:20:00 AM	Morning tea	
	THEME 5	Supercontinent cycles and Geodynamics.
		Theme coordinators: Prof. Zheng Xiang Li, Prof. Louis Moresi, Prof. Shije Zhong
11:40:00 AM	Keynote: Thorsten Becker	Geodynamics of plate motions and long-term Earth evolution
12:20:00 PM	Grant Cox	Does the Earth have a fundamental frequency?
12:40:00 PM	Zheng-Xiang Li	Decoding Earth's rhythm: Modulation of supercontinent cycles by longer superocean cycles
1:00:00 PM	Lunch	
2:00:00 PM	Ross Mitchell	Girdle Earth: The snowball Earth arc magmatism system
2:20:00 PM	Louis Moresi	The evolving nature of continental dynamics since the Archean
2:40:00 PM	Mikael Grenholm	A geodynamic model for the Paleoproterozoic Birimian Orogen of the southern West African Craton
3:00:00 PM	Afternoon tea	
3:00:00 PM 3:20:00 PM	Afternoon tea Keynote: Bill Collins	Billion year, mantle convection cycles through Earth history
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3:20:00 PM	Keynote: Bill Collins	Billion year, mantle convection cycles through Earth history Assembly of Australia in supercontinent cycles
3:20:00 PM	Keynote: Bill Collins Discussion	
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3:20:00 PM 4:00:00 PM 4:20:00 PM	Keynote: Bill Collins Discussion THEME 1 Keynote: Joanne Whittaker	Assembly of Australia in supercontinent cycles Theme coordinators: Dr Jacqueline Halpin, Dr Robin Armit, Prof. Peter Betts East Gondwana breakup and microcontinent formation

Tuesday 13th June	SPEAKER	Presentation Title
	THEME 1	Assembly of Australia in supercontinent cycles
		Theme coordinators: Dr Jacqueline Halpin, Dr Robin Armit, Prof. Peter Betts
9:00:00 AM	Weihua Yao	Long-travelled sediments from India to Australia in the assembled Gondwana
9:20:00 AM	Jacqueline Halpin	Australo-Antarctica in Gondwana: A view from the edge
9:40:00 AM	Keynote: Catherine Spaggiari	Assembly of Australia in supercontinent cycles
10:20:00 AM	Robin Armit	Palaeogeography of the South Australian Craton within Nuna
10:40:00 AM	Jacob Verbaas	A sedimentary overlap assemblage spanning the Gawler Craton and northwestern Laurentia at 1.6 Ga
11:00:00 AM	Morning Tea	
11:20:00 AM	Adam Nordsvan	Laurentian Provenance of the NE Australian Paleoproterozoic Georgetown Inlier – Implications for Nuna Amalgamation
11:40:00 AM	Jacob Mulder	Rodinian devil in disguise: Correlation of 1.25–1.15 Ga strata between Tasmania and Grand Canyon, Arizona
12:00:00 PM	Bo Yang	Spatial and Temporal Detrital Zircon U-Pb Provenance of the Hydrocarbon-Bearing Upper Roper Group, Beetaloo Sub-basin, Northern Australia
12:20:00 PM	Amaury Pourteau	Tectonic evolution of NE Australia during the assembly of supercontinent Nuna: a multi-disciplinary reappraisal
12:40:00 PM	Lunch	
1:40:00 PM	Yebo Liu	Palaeomagnetism of the Boonadgin Dyke Suite, Yilgarn Craton: Implications for the Assembly of the Western Australian Craton and Possible Connection with India
2:00:00 PM	Peter Betts	Accretion of Northern Australia during Nuna amalgamation via recycling of ribbon microcontinents
2:20:00 PM	Discussion	
	THEME 6	Supercontinent cycles and mineral systems
2:40:00 PM	David Huston	Mineral deposits through time: reflections of Earth's tectonic and environmental history
3:20:00 PM	Keynote: Sally Pehrsson	Effect of supercontinent assembly on metal endowment in space and time
3:40:00 PM	Afternoon tea	
4:00:00 PM	Michael Doublier	3D model of the major crustal boundaries of Australia: implications for mineral systems understanding
4:20:00 PM	George Gibson	Late Paleoproterozoic-earliest Mesoproterozoic orogenesis and sediment-hosted Pb-Zn mineralisation in northern Australia: a legacy of supercontinent assembly and plate convergence between Australia
4:40:00 PM	David Huston	Mineral systems of the Paterson Province, Western Australia: diverse metallogeny associated with Rodinia break-up
5:00:00 PM	Uwe Kirsner	Gulf of Nuna: Mesoproterozoic hydrocarbon burial during supercontinent breakup
5:20:00 PM	Grant Cox	The Derim Derim Event of Northern Australia – Geochemical characterisation and impact on hydrocarbon development
5:40:00 PM	Discussion	

Wednesday 14th June	SPEAKER	Presentation Title
	Theme 2	New Progress and constraints on Supercontinent reconstructions
		Theme coordinators: Prof. David Evans, Dr Johanna Salminen.
9:00:00 AM	Keynote: Sergei Pisarevsky	New Progress and Constraints on Supercontinent Reconstructions
9:40:00 AM	Johanna Salminen	Expanding the core of Nuna supercontinent - Paleogeography of the Congo/São Francisco craton at 1.5 Ga
10:00:00 AM	Geoffrey Grantham	Insights into the extent of southern Gondwana in Rodinia: Geochronology and Nd and Sr radiogenic isotope data
10:20:00 AM	Chris Adams	Rodinia in Zealandia; some clues from Precambrian zircons
10:40:00 AM	Morning Tea	
11:00:00 AM	Sheree Armistead	Suturing Madagascar and India – new insights from Lu-Hf data and multi-dimensional scaling of U-Pb detrital zircon data
11:20:00 AM	Erin Martin	Evaluation of full-plate reconstructions of the Neoproterozoic using Hf isotopes in zircon
11:40:00 AM	Naresh Kochhard	Archean continental crust beneath Mauritus: Implications for the Greater Malani Continent
12:00:00 PM	Lunch	
1:00:00 PM	Vladmir Pavlov	New data from the northern Uchur-Maya region (eastern Siberia) seem to confirm the Siberia- Laurentia coherence during the Late Mesoproterozoic- Early Neoproterozoic
1:40:00 PM	Piotr Krzywiec	Rodinia break-up along the SW margin of the East European Craton (SE Poland) – new evidence based on deep seismic and grav-mag data
2:00:00 PM	Bin Wen	Paleomagnetism of early-Neoproterozoic volcanic rocks in SW Tarim and its paleogeographic
2:20:00 PM	Robert Boris	Constraints on the Ediacaran Inertial Interchange True Polar Wander Hypothesis: a New Paleomagnetic Study in Morocco (West African Craton)
2:40:00 PM	Afternoon Tea	
3:00:00 PM	Jiu-long Zhou	Ca. 750–720 Ma tectonic transition recorded in the Bemarivo terrane balances the global plate kinematic budget during Rodinia break-up
3:20:00 PM	Qiwei Li	Heterogeneous mantle source modified by subduction beneath the western Yangtze Block, South China: evidence from Neoproterozoic Dengxiangying mafic dikes
3:40:00 PM	Zhibin Lei	LA-ICP-MS U-Pb Dating of Heishitougou Basaltic Zircons: Implications for a More Extensive and Lasting Effect of the Paleo-Asian Ocean Southward Subduction
4:00:00 PM	Discussion	
4:20:00 PM	Presentation and Prizes	