



Akaroa 2021

25th Annual New Zealand
Phylogenomics Meeting

Mount Vernon Lodge

Program

Tuesday 9 Feb		
1:00 – 2:00pm	Lunch	
2:00pm	Welcome and information	
<i>Session 1</i>		
2:10 – 2:30	Charles Semple	Building networks with caterpillars and trinetts.
2:30 – 2:50	Simone Linz	Superfluous arcs in phylogenetic networks.
2:50 – 3:10	Allan Bai	Reconstructing networks from ancestral profiles.
3:10 – 3:40	Afternoon tea	
<i>Session 2</i>		
3:40 – 4:00	Gillian Gibb	Birds in the clouds: k-mers and genome exploration of New Zealand rails.
4:00 – 4:20	Julien Gasper	Molecular basis of flightlessness in rails.
4:20 – 4:40	Daniel Huson (recorded)	Phylogenetic context using phylogenetic outlines.
6:30pm	Evening Bar-b-que Mt Vernon Lodge (BYO alcohol)	

Wednesday 10 Feb

Session 3

9:30 – 9:50am	Russell Gray	Testing Diamond's axis of orientation hypothesis: Environmental barriers limit cultural spread but do not consistently favor Eurasia.
9:50 – 10:10	Ant Poole	A deep phylogeny of viruses from protein structure.
10:10 – 10:30	Alexei Drummond	Lingua Phylo: Communicating and reproducing probabilistic models for phylogenetic analysis.
10:30 – 11:00	Morning tea	

Session 4

11:00 – 11:20	Jordan Douglas	Optimising phylogenetic MCMC operator weights with machine learning.
11:20 – 11.40	Cinthy Jimenez Silva	Molecular epidemiology of SARS-CoV-2 in South America.
11.40 – 12:00	problem/discussion session 1	
12:00 – 2:00pm	Lunch	
2:00pm –	Afternoon: Excursions/Free time: may be swapped with Thursday afternoon plans if weather dictates	
	Dinner – own arrangements	

Thursday 11 Feb

Session 5

9:30 – 9:50am	Simon Harris	Branching processes and sample genealogies.
9:50 – 10:10	Lena Collienne	The space of discrete coalescent trees.
10:10 – 10:30	Paul Gardner	Features of functional genes.
10:30 – 11:00	Morning tea	

Session 6

11:00 – 11:20	Peter Lockhart	Convergent evolution in white clover.
11:20 – 11:40	Nimeshika Pattabiraman	Landscape Genetics of Brushtail possums in New Zealand.
11:40 – 12:00	David Bryant	How to quickly distort a tree to find its root.
12:00 – 2:00pm	Lunch	

Session 7

2:00 – 2:20	Alex Gavryushkin	The space of phylogenetic time trees.
2:20 – 2:40	Nobuto Takeuchi	The origin of the central dogma through conflicting multilevel selection.
2:40 – 3:00	Remco Boukaert	Matrix representations of tree distributions.
3:00 – 3:30	Afternoon tea	

Session 8

3:30 – 3:50	David Carmelet-Rescan	Phylogenetic origins of New Zealand's brushtail possums and investigation of their transcriptome for evidence of selective pressure.
3:50 – 4:10	Kylie Chen	Effect of errors on phylogenetic analysis.
4:10 – 4:30	problem/discussion Session 2	
	Dinner – own arrangements	

Friday 12 Feb

Session 9

9:30 – 9:50am	Fábio Mendes	Emergent integrative models: a methodological paradigm for phylogenetics.
9:50 – 10:10	Jandre Snyman	AFS estimation by tensor trains.
10:10 – 10:30	Walter Xie	Reproducing a Bayesian Phylogeography Analysis of NZ COVID-19 using LPhy.
10:30 – 11:00	Morning tea	
9:50 – 10:10	Mike Steel	Ranked tree child networks
12:00pm	Lunch (optional) and departure	