Mathematics of
Evolution-Phylogenetic Trees and Networks
Workshop 1: Foundations of Phylogenetic Networks
(6–8 Sep 2023)



Venue

IMS Auditorium
Institute for Mathematical Sciences
3 Prince George's Park
Singapore 118402

ORGANIZING COMMITTEE

Co-Chairs

Daniel Huson University of Tübingen

Louxin Zhang National University of Singapore

Members

Michael Fuchs National Chengchi University

> Simone Linz University of Auckland

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Rohan Williams National University of Singapore

> Taoyang Wu University of East Angila

For more information: Click here

Workshop 1 Foundations of Phylogenetic Networks (6–8 Sep 2023)

Wednesday, 6 September 2023				
Time	Title	Speaker		
0845-0900	Registration			
0900-0910	Opening Remarks			
0910-0940	Identifiability of species networks from multilocus data under the Network Multispecies Coalescent model	Elizabeth Allman University of Alaska Fairbanks, USA		
0940-1010	Recovering the species tree under lateral gene transfer	Sebastien Roch University of Wisconsin-Madison, USA		
1010-1030	Coffee Break			
1030-1100	The emergence of branching structures in models of reticulated evolution	Francois Bienvenu ETH Zurich, Switzerland		
1100-1130	A branching process approach to level-k phylogenetic networks	Benedikt Stufler TU Wien, Austria		
1130–1200	Limit laws for patterns in ranked tree-child networks	Michael Fuchs National Chengchi University, Taipei		
1200-1400	Lunch Break			
1400-1430	A database approach to solve the tree containment problem in phylogenetic networks	Philippe Gambette Université Gustave Eiffel, France		
1430-1500	Extended μ-representation for the identification and comparison of orchard phylogenetic networks	Joan Carles Pons University of the Balearic Islands, Spain		
1500-1530	Labellable phylogenetic networks	Andrew Francis Western Sydney University, Australia		
1530-1600	Coffee Break			
1600-1800	Discussion			

Thursday, 7 September 2023				
Time	Title	Speaker		
0845-0900	Registration			
0900-0930	Model selection for phylogenetic networks data with cross-validation	James Degnan University of New Mexico, USA		

Thursday, 7 September 2023			
Time	Title	Speaker	
0930-1000	Tree of blobs inference under the coalescent model	Hector Banos California State University, San Bernardino, USA	
1000-1030	Distinguishing level-1 phylogenetic network-based Markov models	Elizabeth Gross University of Hawaii at Mānoa, USA	
1030-1100	Group Photo & Coffee Break		
1100-1130	Network Classes and Their Mathematical Properties	Louxin Zhang National University of Singapore, Singapore	
1130-1200	Stretched exponentials in the asymptotics of phylogenetic networks	Michael Wallner TU Wien, Austria	
1200-1400	Lunch Break		
1400-1700	Discussion		

Friday, 8 September 2023				
Time	Title	Speaker		
0845-0900	Registration			
0900-0930	On the Sackin index of galled trees	Bernhard Gittenberger TU Wien, Austria		
0930-1000	On the joint distribution of the numbers of cherries and pitchforks for the Ford model	Kwok Pui Choi National University of Singapore, Singapore		
1000-1030	Bijections for phylogenetic networks	Guan-Ru Yu, National Kaohsiung Normal University, Kaohsiung		
1030-1100	Coffee Break			
1100-1200	Discussion			
1200-1400	Lunch Break			
1400-1430	Finding redundancy in phylogenetic networks	Charles Semple University of Canterbury, New Zealand		
1430-1500	How far is my network from being edge-based? Proximity measures for edgebasedness of unrooted phylogenetic networks	Mareike Fischer University of Greifswald, Germany		
1500-1530	Exploring spaces of semi-directed phylogenetic networks	Kristina Wicke New Jersey Institute of Technology, USA		
1530-1600	Coffee Break			

Friday, 8 September 2023		
Time	Title	Speaker
1600-1700	Discussion: Open Problems	

This schedule is accurate as of 31 August 2023. It is subjected to changes