



VICTORIA UNIVERSITY OF  
**WELLINGTON**  
TE HERENGA WAKA

## Seventh Wellington Workshop in Probability and Mathematical Statistics

**Day 1: Thursday 5 December 2019**

**Room: LB LT118**

**Session 1.1 (12:20 – 2:00)**

**Chair: John Haywood**

12:20 – 12:30	<i>Formal Welcome, Professor Simon Davy, Dean of Science, Victoria University of Wellington</i> <i>Housekeeping, John Haywood</i>
12:30 – 1:00	Priscilla <b>Greenwood</b> , University of British Columbia <i>Noise Sharing and Mexican-Hat Coupling in a Stochastic Neural Field</i>
1:00 – 1:30	Leigh <b>Roberts</b> , Victoria University of Wellington <i>On the Use of the second Khmaladze Transform to Test Goodness of Fit in Mixtures of Hidden Markov Models</i>
1:30 – 2:00	Jesse <b>Goodman</b> , University of Auckland <i>Extreme Values, Couplings and Graphs</i>

**Refreshments 2:00 – 2:30**

**Session 1.2 (2:30 – 4:00)**

**Chair: Mark Holmes**

2:30 – 3:00	Martin <b>Barlow</b> , University of British Columbia <i>Uniform Spanning Tree and Loop Erased Random Walk</i>
3:00 – 3:30	Alejandro <b>Ramirez</b> , Catholic University of Chile <i>Equality between Quenched and Annealed Rate Functions of Random Walks in Random Environments</i>
3:30 – 4:00	Akira <b>Sakai</b> , Hokkaido University <i>Finding Optimal Solutions by Stochastic Cellular Automata (SCA)</i>

**Refreshments 4:00 – 4:30**

**Session 1.3 (4:30 – 5:30)**

**Chair: Ilze Ziedins**

4:30 – 5:00	Han Liang <b>Gan</b> , University of Waikato (from 2020) <i>Arcsine Laws for Permutation Generated Random Walks</i>
5:00 – 5:30	Xi <b>Geng</b> , University of Melbourne <i>The Signature of a Path: Uniqueness and Beyond</i>

**Drinks, Workshop Dinner and Birthday Cake: Shed 5, Queens Wharf, Wellington 7:15 –**

<b>Day 2: Friday 6 December 2019</b>		<b>Room: LB LT118</b>
<b>Session 2.1 (10:00 – 11:00)</b>		<b>Chair: Richard Arnold</b>
10:00 – 10:30	E. James <b>Harner</b> , West Virginia University <i>Random KNN Classification and Regression</i>	
10:30 – 11:00	Yuichi <b>Hirose</b> , Victoria University of Wellington <i>Using Copulas to Model and Simulate Two-Dimensional Warranty Data</i>	
<b>Refreshments 11:00 – 11:30</b>		
<b>Session 2.2 (11:30 – 1:00)</b>		<b>Chair: Andrew Barbour</b>
11:30 – 12:00	Sophie <b>Hautphenne</b> , University of Melbourne <i>Inference in Population-Size-Dependent Branching Processes</i>	
12:00 – 12:30	Peter <b>Braunsteins</b> , University of Melbourne <i>Local Limit Theorems for Occupancy Models</i>	
12:30 – 1:00	Sheldon M. <b>Ross</b> , University of Southern California <i>The Friendship Paradox and a Probabilistic Friendship Model</i>	
<b>Workshop Photo, then Lunch 1:00 – 2:00</b>		
<b>Session 2.3 (2:00 – 3:30)</b>		<b>Chair: Ryan Admiraal</b>
2:00 – 2:30	Nathan <b>Ross</b> , University of Melbourne <i>Dirichlet and Poisson-Dirichlet Approximations for some Wright-Fisher Models with Mutation</i>	
2:30 – 3:00	Nicholas <b>Witte</b> , Massey University, Palmerston North <i>The Distribution of Zeros of the Derivative of the Riemann Zeta Function via Random Unitary Matrices</i>	
3:00 – 3:30	Kit <b>Withers</b> , Wellington <i>A Multivariate Chain Rule for Derivatives with Applications to Studentized Functions</i>	
<b>Refreshments 3:30 – 4:00</b>		
<b>Session 2.4 (4:00 – 5:35)</b>		<b>Chair: Ivy Liu</b>
4:00 – 4:30	Karim <b>Seghouane</b> , University of Melbourne <i>Sparse Principal Component Analysis with Preserved Sparsity Pattern</i>	
4:30 – 5:00	Budhi <b>Surya</b> , Victoria University of Wellington <i>Exit Time Distributions of the Finite Mixture of Markov Jump Processes: Properties and the EM Estimation</i>	
5:00 – 5:30	Estate <b>Khmaladze</b> , Victoria University of Wellington <i>Distribution-free Testing for Markov Sequences</i>	
5:30 –	<i>Closing, then drinks at the bar 😊</i>	
<b>Day 3: Saturday 7 December 2019</b>		<b>Leisure Activities: TBC</b>
TBC – TBC	<b>Optional, details TBC</b> More details will be given on the Workshop website.	