Acknowledgements

John Braun  
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Laura Aileen Briskman  
*Springer Nature*

Dave Campbell  
*Carleton University*

Graham Carr, President  
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PROGRAMME AND ABSTRACTS

Welcome message from President

On behalf of Concordia University, it’s my pleasure to offer a warm welcome to the 6th edition of the Canadian Conference in Applied Statistics.

Statistical sciences are increasingly at the foundations of how we understand the world and focus on how to make it better. This is why Concordia is so enthusiastic to host this virtual gathering and proud to welcome such an impressive cross-section of speakers and panelists.

The scope of the conference touches on a rich diversity of themes. It’s especially heartening to know that the graduate students who represent the next generation of talent will have an opportunity to showcase their posters digitally. And I’m thrilled that there will be a special tribute to our longtime colleague, Jose Garrido, who was so instrumental in the development of actuarial mathematics at Concordia.

I wish you a wonderful, rewarding conference.

Take care,

Graham Carr
President and Vice-Chancellor
Local Organizing Committee

Suchit Ahuja  
Supply Chain & Business Technology Management

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Yogendra P. Chaubey (Chair)  
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Chapel Hill, NC, USA

Rob Tibshirani
Stanford University
Stanford, CA, USA
CONFERENCE PROGRAMME

The layout of the programme given below is very similar to the version on the conference website. The brief programme is followed by the details of each session along with the list of speakers regarding the abstracts of their papers that are arranged in alphabetical order of the names of presenters.

SCIENTIFIC PROGRAMME SCHEDULE

<table>
<thead>
<tr>
<th>July 15, 2021 (Thursday)</th>
<th>Event/Details</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>18:00 - 20:00</td>
<td>Welcome Reception/Networking</td>
<td>Virtual</td>
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<tr>
<th>July 16, 2021 (Friday)</th>
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<th>Note</th>
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| 08:30 - 09:00         | **Opening of the Conference**  
Welcome by Sponsors: Don Estep (CANSSI), Graham Carr (Concordia), Erica Moody (CRM-StatLab) | |
| 09:00 - 10:00         | **Plenary Session – PS5 (Prof. Dwivedi Memorial Lecture)**  
Serena Ng, Columbia University | |
| 10:00 - 10:30         | Break | |
| 10:30 - 12:00         | **Parallel Sessions**  
- Advances in Actuarial Science – 1, IAS1  
- Advances in Inference in Directional Data, IS2  
- Big Data in Agriculture, IS5  
- Clustering and Classification in Data Science, IS6  
- Counting, Tracking and Mapping: Advances in Spatial Modelling in Fisheries Science, IS7  
- Design and Analysis of Longitudinal Studies, IS8  
- Functional Data Analysis, IS12  
- Some Recent Advances In Survival Analysis, IS28  
- Contributed Papers Session I, CS1 | |
| 12:00 - 12:30         | Break | |
| 12:30 - 13:30         | **Plenary Session PAS2**  
Jose Garrido, Concordia University | |
| 13:30 - 14:00         | Break | |
| 14:00 - 15:00         | **Plenary Session PS2**  
Richard Cook, University of Waterloo | |
<table>
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<th>Time</th>
<th>Event/Details</th>
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<tr>
<td>15:00 - 15:30</td>
<td>Break</td>
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<td>15:30 - 17:00</td>
<td><strong>Parallel Sessions</strong></td>
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<tr>
<td></td>
<td>♦ Advances in Actuarial Science – 2, IAS2</td>
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<td></td>
<td>♦ MCMC Methods and Computational Statistics, IS15</td>
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<td>♦ Modern Approaches to Infectious Disease Modelling, IS16</td>
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<td>♦ Moment Condition Models: Identification Issues and Inference, IS17</td>
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<td>♦ Recent Developments in Cure Rate Model, IS24</td>
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<td>♦ Stochastic Methods in Finance, IS32</td>
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<td>♦ Use of Machine Learning Procedures for Survey Data, IS34</td>
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<td>♦ Survival Analysis and Causal Inference Applied to Forest Fire Data, IS33</td>
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<td>♦ Contributed Papers Session II, CS2</td>
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<td>17:00 - 17:30</td>
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<td>17:30 - 18:30</td>
<td><strong>Plenary Session PS3</strong></td>
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<td>Christian Genest, McGill University, Montreal</td>
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<td>18:30 - 19:00</td>
<td>Break</td>
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<tr>
<td>19:00 - 20:00</td>
<td><strong>Plenary Session PS10 - CANCELLED</strong></td>
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<td>Rob Tibshirani, Stanford University</td>
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<tr>
<td>09:00 - 10:00</td>
<td><strong>Plenary Session PS4</strong></td>
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<td>Robert E. Kass, Carnegie Mellon University</td>
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<td>Break</td>
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<td>10:30 – 12:00</td>
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<td>♦ Advances in Actuarial Science – 3, IAS3</td>
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<tr>
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<td>♦ Inference in Survival Data, IS13</td>
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<td>♦ Recent Advances in Econometrics, IS22</td>
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<td>♦ Recent Advances in Semi-Parametric Mixture Models, IS23</td>
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<td>♦ Risk Modeling, IS25</td>
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<td>♦ Small Area Estimation, IS26</td>
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<td>♦ Some Recent Advances in Statistical Inference, IS27</td>
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<td></td>
<td>♦ Statistics and Deep Learning, IS31</td>
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<td></td>
<td>♦ Contributed Papers Session III, CS3</td>
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<td>12:00 - 12:30</td>
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<td>12:30 - 13:30</td>
<td><strong>Plenary Session PAS1</strong></td>
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<td>Jun Cai, University of Waterloo</td>
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<td>14:00 - 15:00</td>
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<td>J. Sunil Rao, University of Miami</td>
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<td>15:00 - 15:30</td>
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<td>15:30 - 17:00</td>
<td><strong>Parallel Sessions</strong></td>
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<tr>
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<td>♦ Advances in Actuarial Science – 4, IAS4</td>
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<td></td>
<td>♦ Applications of Survival Analysis, IS3</td>
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<td></td>
<td>♦ Ecological Statistics: Opportunities and Challenges, IS9</td>
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<td>♦ Latent Variables and Their Applications, IS14</td>
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<td>♦ Recent Advances in Analysis Involving Misclassification, IS21</td>
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<td></td>
<td>♦ Recent Advances in Adaptive Treatment Strategies, IS20</td>
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<td>♦ Statistical Genetics in Canada, IS29</td>
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<td>♦ Contributed Papers Session IV, CS4</td>
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<tr>
<td></td>
<td>♦ <strong>Graduate Poster Session, GP</strong></td>
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<td>17:00 - 17:30</td>
<td>Break</td>
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<td>17:30 - 18:30</td>
<td><strong>Judging of Graduate poster Session</strong></td>
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<td>♦ Special Contributed Paper Session-Financial Engineering, SCS1</td>
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<td>♦ Special Contributed Paper Session- Statistical Modeling of COVID-19 Pandemic, SCS2</td>
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<td>♦ <strong>Graduate Poster Session</strong> (for Judges only)</td>
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<td>18:30 - 19:30</td>
<td><strong>Plenary Session PS1</strong></td>
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<td>W. John Braun, UBC Okanagan</td>
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### July 18, 2011 (Sunday)

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<th>Time</th>
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<tr>
<td>09:00 - 10:00</td>
<td><strong>Plenary Session PS7</strong></td>
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<td>Nancy Reid, University of Toronto</td>
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<tr>
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<td>♦ Advances in Actuarial Science – 5, IAS5</td>
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<td>♦ Advances in Copula-based Inference, IS1</td>
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<td>12:30 - 13:30</td>
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<td>Manuel Morales, University of Montréal</td>
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<tr>
<td>13:30 - 14:00</td>
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<td>14:00 - 15:00</td>
<td><strong>Plenary Session PS8</strong></td>
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<td>Louis-Paul Rivest, Université Laval</td>
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<tr>
<td>15:00 - 15:30</td>
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<td>15:30 – 16:30</td>
<td><strong>Plenary Session PS9</strong></td>
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<td>David Stephens, McGill University</td>
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<td>16:30 - 17:00</td>
<td>Break</td>
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<tr>
<td>17:00 - 18:00</td>
<td><strong>Concluding Session (Felicitation to Jose + Misc. + Vote of Thanks)</strong></td>
</tr>
</tbody>
</table>
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*Graduate Student, Concordia University*

Andreas Bancheri  
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