

# 2019 Western-ICLR Multi-hazard Risk and Resilience Workshop



Institute for Catastrophic  
Loss Reduction

Building resilient communities



## Program

### **Day 1 – Monday**

**Opening: 8:45 – 9:00** Matt Davison (Dean of Faculty of Science, Western University),

**Session 1: Multi-hazard risk and resilience assessment in a changing environment**  
(Session Chair: Davison and Aghakouchak)

9:00-9:40, Short introductory presentation from speakers and attendees

9:40-10:00, Prof. Slobodan Simonovic (Western), '*Mutli-hazard resilience*'

10:00-10:20, Prof. Stephen Evans (Waterloo) '*Structure of destructive geological cascades; implications for risk*'

10:20-10:40, Prof. Matt Davison '*Insights from financial risk management for disaster risk*'

20 min break

11:00-11:20, Prof. Horia Hangan (Western) '*Non-synoptic winds and their impacts on buildings and structures*'

11:20-11:40, Mr. Dan Sandink (ICLR) '*ICLR activities for reducing risk of basement flood, high wind and fire for Canadian homes*'

11:40-12:00, Prof. Jiandong Ren (Western) '*Insurance risks for natural disasters*'

Lunch: 12:00-13:00 (Physics and Astronomy Building Atrium)

**Session 2: Cross-disciplinary topics for natural hazard and risk assessment: modelling complexity/dependency and new emerging techniques** (Session Chair: Mori and Najafi)

13:00-13:20, Prof. Mahesh Pandey (Waterloo) '*Probabilistic assessment of damage cost under multiple seismic hazards*'

13:20-13:40, Dr. Boyu Feng (Western) '*The Impact of urbanization on urban flooding using hydrologic/hydraulic models*'

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13:40-14:00, Prof. Amir Aghakouchak (UC Irvine) *'Multi-hazard scenarios for analysis of compound extreme events'*

14:00-14:20, Dr. Ying Zhang (NRCan) *'Earth observation based processing frameworks for post-disaster response and assessment in urban areas'*

14:20-14:40, Mr. Nick Martyn (RiskLogik Inc.) *'An ensemble approach to holistic flood risk assessment'*

20 min break

15:00-15:20, Prof. Sriram Narasimhan (Waterloo) *'Robotics and non-contact sensing for infrastructure risk assessment'*

15:20-15:40, Prof. Gail Atkinson (Western) *'Induced seismicity: implications of non-stationary hazards and risks'*

15:40-16:00, Dr. Kristin Clemens (St. Joseph's Health Care London/Western) *'The impact of ambient temperature on health outcomes in Ontario'*

16:00-16:20, Dr. Erin Azzopardi ([Mitacs](#)) and Ms. Kate Huner-Johnson (Western) to introduce NSERC Alliance and Mitacs Accelerate funding

16:20-17:30, Topics for discussion, Discussions facilitated by the session chairs and continues at Social Dinner Discussion

18:00 - end, Social Dinner Discussion @ Windermere Manor/Western

**Registration and RSVP required**

Dinner will be provided

### ***Day 2 - Tuesday***

#### ***Session 3: Linking hazard, exposure, risk and resilience across multiple hazards – disciplinary contributions (Session Chair: Martell and Molnar)***

9:00-9:20, Briefing from Day 1 discussion

9:20-9:40, Prof. Nobuhito Mori (Kyoto University) *'Long-term hazard assessment of coastal and river flooding by tsunami and typhoons in Japan'*

9:40-10:00, Prof. David Martell (Toronto) *'Integrated landscape management to protect forest resources, infrastructure and communities'*

10:00-10:20, Prof. Reza Najafi (Western) *'Characterizing the compounding effects of pluvial, riverine and coastal flooding in St. Lucia'*

20 min break

10:40-11:00, Prof. Tomohiro Yasuda (Kansai University) *'Assessment of annual aggregate risk by storm surge disaster in Japanese major bays'*

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11:00-11:20, Prof. Sheri Molnar (Western) '*Site-specific seismic hazard assessment in Canada*'

11:20-11:40, Prof. Eric Desjardins (Western, Rotman Institute of Philosophy) '*Pluralism for a geo-socio-ecological perspective on multi-hazard resilience*'

11:40-12:00, Mr. Colin McFayden (Aviation, Forest Fire and Emergency Services, ON Min. Nat. Res. & For.) '*Risk and wildland fire management in Ontario*'

Lunch: 12:00-13:00 (Physics and Astronomy Building Atrium)

***Session 4: Linking hazard, exposure, risk and resilience across multiple hazards – future needs (research, education, public involvement, role of private sector, role of governments) and from theory to practice (Session Chair: Journey and Kovacs)***

13:00-13:20, Mr. Murray Journey and Dr. Michal Kolaj (NRCan) '*A national earthquake hazard and risk profile of Canada*'

13:20-13:40, Nicky Hastings (NRCan), '*How can Canadian coastal communities understand and mitigate against coastal flooding?*'

13:40-14:00, Mr. Cordy Tymstra (Wildfire Management, Government of Alberta) / Dr. Mike Wotton (Canadian Forest Service) '*Early warning systems for enhanced situational awareness and preparedness for spring wildfire activity in Alberta, Canada*'

14:00-14:20, Mr. Paul Kovacs (ICLR) '*Research to support implementation of the Sendai Framework for Disaster Risk Reduction*'

14:20-14:40, Topics for break-up sessions, led by Prof. Reza Najafi

20 min break

15:00-16:30 Break-up sessions, led by Prof. Reza Najafi and the organizing committee members

Closing words

17:00 – end Social Dinner @ GradClub - Dinner will be provided

