

Tuesday, 28 February

8:30-9:30

Registration

9:30-9:45

Introduction and welcome

Charles Williams

Tsunami processes and hazard 1

Session chair: Charles Williams

9:45-10:15

Invited talk: Oral-01-01

Alice Gabriel

Multi-physics *and* data-driven earthquake-tsunami modeling

10:15-10:40

Morning tea

10:40-10:50

EQC Welcome

Jo Horrocks

10:50-11:00

GNS Welcome

Gill Jolly

Tsunami processes and hazard 2

Session chair: Rob Langridge

11:00-11:30

Invited talk: Oral-01-02

Aditya Gusman

Unusually fast and large tsunami generated by the 2022 Hunga Tonga – Hunga Ha’apai volcano eruption

11:30-11:45

Talk: Oral-01-03

Tony Song

Satellite altimetry and genesis of the 2022 Tonga volcanic tsunami

11:45-12:00

Talk: Oral-01-04

Tara Nye

Constraining Rupture Parameters of the 2010 M7.8 Mentawai Tsunami Earthquake Using Near-Field Simulated and Observational Data

12:00-12:15

Talk: Oral-01-05

William Power

Probabilistic Assessment of Tsunami Hazards in New Zealand

12:15-12:30

Talk: Oral-01-06

Xiaoming Wang

Lake Tsunami in Alpine Fault Earthquake Events – Numerical Studies in Lake Tekapo

12:30-14:00

Lunch

Earthquake cycle processes and rheology 1

Session chair: Chris Rollins

Remote questions:

Charles Williams

Simone Puel

14:00-14:15

Talk: Oral-01-08

An Adjoint-based Optimization Method for Jointly Inverting Heterogeneous Material Properties and Fault Slip From Earthquake Surface Deformation Data

14:15-14:30

Talk: Oral-01-09

Yukitoshi Fukahata

Detection of Plastic Strain Using GNSS Data of Pre- and Post-Seismic Deformation of the 2011 Tohoku-oki Earthquake

14:30-14:45

Talk: Oral-01-10

Tim Stern

Evidence for Serpentinization in the Upper Mantle of SW North Island: Implications for Slow Slip and Gravity Anomalies

14:45-15:00

Talk: Oral-01-11

Dmitry Garagash

Generation and maintenance of low effective stress along faults by fluid flow in Laboratory and in Nature, and its implications for Seismogenesis

15:00-15:30

Afternoon tea

Earthquake cycle processes and rheology 2

Session chair: Simone Puel

15:30-16:00

Invited talk: Oral-01-12

Kali Allison

Spinning Up Earthquake Cycle Models

16:00-16:15

Talk: Oral-01-13

Yi-Wun Mika Liao

The role of frictional heterogeneities in the earthquake cycle

16:15-16:30

Talk: Oral-01-14

Yuyun Yang

Influence of Creep Compaction and Dilatancy on Earthquake Sequences and Slow Slip

16:30-16:45

Talk: Oral-01-15

Kimihiko Mochizuki

Seismicity of Regular and Slow Earthquakes in Relation to Seamount Subduction

16:45-17:00

Talk: Oral-01-16

Susan Ellis

Transient Fluctuations in Stress and Slip Caused by Geometric Irregularities in Shear Zones: Numerical Modelling of an Outcrop Analogue for Active Subduction Interface Deformation

17:30 -20:00

Icebreaker

Biddy Kate's, across Alfred Street from Events Centre