

**Friday, 3 March**  
**Introduction to Fieldtrip**

9:00-9:30    Talk    Andy Howell

**Subduction megathrust processes 3    Session chair: Laura Wallace**

9:30-9:45    Talk: Oral-04-01    Aron Meltzner    Coral Microatoll Paleogeodetic Records from Sumatra and Luzon

9:45-10:00    Talk: Oral-04-02    Nicola Litchfield    Past earthquakes on the southern Hikurangi Subduction Zone

10:00-10:15    Talk: Oral-04-03    Dee Ninis    Causes of permanent vertical deformation at subduction margins: evidence from elevated late Pleistocene marine terraces of the southern Hikurangi Margin, Aotearoa New Zealand

10:15-10:30    Talk: Oral-04-04    Elena Manea    Ground Motion Models for Subduction seismicity in New Zealand

**10:30-11:00    Morning Tea**

**Earthquake nucleation and rupture dynamics 1    Session chair: Alice Gabriel    Remote questions: Charles Williams**

11:00-11:30    Invited Talk (Remote): Oral-04-05    Lingling Ye    Deep Megathrust Rupture and Faulting Interaction during the 2021 MW 8.1 Kermadec Earthquake Sequence

11:30-11:45    Talk: Oral-04-06    Sydney Dybing    Rapid Estimation of Single-Station Earthquake Magnitudes With Machine Learning on a Global Scale

11:45-12:00    Talk: Oral-04-07    Artemii Novoselov    Deep Learning with Uncertainties for the phase onset time prediction

12:00-12:15    Talk: Oral-04-08    Emily Warren-Smith    Heterogeneity in Microseismicity and Stress Near Rupture-Limiting Section Boundaries Along the Late-Interseismic Alpine Fault

12:15-12:30    Talk: Oral-04-09    Julian Lozos    Dynamic Rupture Simulations on the Alpine Fault: Investigating the Role of Fault Geometry on Rupture Size and Behaviour

**12:30-13:30    Lunch**

**Earthquake nucleation and rupture dynamics 2    Session chair: Charles Williams**

13:30-14:00    Invited Talk: Oral-04-10    Yoshihiro Kaneko    Fault frictional heterogeneities can explain the inferences of slow earthquake transiting to fast rupture

14:00-14:15    Talk: Oral-04-11    Eiichi Fukuyama    Estimation of Friction Parameters and Slip Distribution from the Strain Gauge Array beneath the Fault during the Large-scale Bi-axial Friction Experiments

14:15-14:30    Talk: Oral-04-12    Bo Li    3D Dynamic Rupture and Ground Motion Simulations for the Gulf of Aqaba Fault System

14:30-14:45    Talk: Oral-04-13    Jessie Vermeer    Coulomb Fault Stress Transfer Through the Hope-Kelly-Alpine Fault Intersection Zone

14:45-15:00    Talk: Oral-04-14    Megan Withers    Can Tectonic Scale Analogue Modelling Provide Insight Into the Initiation and Complexity of the 2016 Kaikoura Earthquake Ruptures?

15:00-15:15    Talk: Oral-04-15    Ryosuke Ando    Rupture Path of the 2016 Kaikoura, NZ, Earthquake Inferred from Dynamic Rupture Simulation

**15:15-15:45    Afternoon Tea**

**15:45-16:45    International Science Board Meeting, Marlborough Events Centre**