

2017 Monthly Webconferences: Ground Motion Simulation & Validation (GMSV)

Objective: To coordinate and obtain feedback on the plans of the [2017 QuakeCoRE GMSV research projects](#).

PLEASE NOTE: Presentation slides below are the author's property. They may contain unpublished or preliminary information and should only be used while viewing the talk.

28 September 2017 (9:00-10:30am NZT, web link:<https://canterbury.zoom.us/j/374852384>**)**

Purpose: To share ideas for 2018 QuakeCoRE RfP proposals

Agenda:

- Overview of the RfP (Brendon Bradley, ~5 minutes)
- Discussion of the FP1 deliverables to TEC (funders) and workplan of coordinated project (Brendon Bradley, 15min)
- Discussion from all on call about RfP ideas (All, ~5 minutes)

27 July 2017 (9:00-10:30am NZT, web link:<https://canterbury.zoom.us/j/374852384>**)**

Purpose: To coordinate and share research activities on, and related to, 2017 QuakeCoRE GMSV research projects

Agenda:

- Elaboration on purpose of web conference (Brendon Bradley, ~5 minutes)
- Plans and Progress of ["Investigation of systematic ground motion effects through simulation of 144 Mw3.5-5.0 magnitude earthquakes in the Canterbury region"](#) (Robin Lee, 15min)
- Discussion (All, ~5 minutes)
- Plans and Progress of ["Site investigation in the Nelson/Tasman region"](#) (Rebecca McMahon, 15min)
- Discussion (All, ~5 minutes)
- Plans and Progress of ["Topographic amplification in the Christchurch Port Hills: Ambient vibrations and numerical analysis"](#) (Seokho Jeong and Kami Mohammadi, 15min)
- Discussion (All, ~5 minutes)
- 2018 QC [Ground Motion Simulation & Validation activities: Thoughts and coordination of a 'centralised' work plan](#) (All, discussion led by Brendon Bradley, ~20 minutes)

Participants: Brendon Bradley (UC), Andreas Skarlatoudis (AECOM), Chris McGann (UC), Connor Hayden (UA), Jeff Fraser (Golder), Jeff Bayless (AECOM), Paul Somerville (AECOM), Rebecca McMahon (UA), Ricardo Taborada (Memphis), Robin Lee (UC), Seokho Jeong (QuakeCoRE), James Kaklamanos (Merrimack), Karim Tarbali (UC), Reagan Chandramohan (UC), Romain Meite (UA), Ethan Thomson (UC).

Apologies: Didier Pettinga (Holmes), James Dismuke (Golder), Adrian Rodriguez-Marek (VirginiaTech), David Dempsey (UA), Hoby Razafindrakoto (UC), Liam Wotherspoon (UA),

22 June 2017 (9:00-10:30am NZT, web link:<https://canterbury.zoom.us/j/374852384>**)**

Purpose: To coordinate and share research activities on, and related to, 2017 QuakeCoRE GMSV research projects

Agenda:

- Elaboration on purpose of web conference (Brendon Bradley, ~5 minutes)
- Plans and Progress of ["Dynamic and kinematic modelling of backthrust and branching faults"](#) (Jeff Bayless, 15min)
- Discussion (All, ~5 minutes)
- Plans and Progress of ["A Data-Driven Vs30 Map for New Zealand Using Geostatistical and Bayesian Methods"](#) (Kevin Foster, 15min)
- Discussion (All, ~5 minutes)
- Plans and Progress of ["Coupling Site Specific Ground Response Analysis with Physics-Based Ground Motion Simulation"](#) (Chris de la Torre, 15min)
- Discussion (All, ~5 minutes)
- Plans and Progress of ["Information on the new NeSI HPC platforms"](#) (Alex Pletzer, 15min)
- Discussion (All, ~5 minutes)
- General Discussion (All, ~10 minutes)

Participants: Brendon Bradley (UC), Alex Pletzer (NeSI), Andreas Skarlatoudis (AECOM), Chris de la Torre (UC), Chris McGann (UC), Connor Hayden (UA), David Dempsey (UA), Hoby Razafindrakoto (UC), James Dismuke (Golder), Jeff Bayless (AECOM), Kevin Foster (UC), Liam Wotherspoon (UA), Paul Somerville (AECOM), Rebecca McMahon (UA), Ricardo Taborada (Memphis), Robin Lee (UC), Seokho Jeong (QuakeCoRE), Sung Bae (QuakeCoRE),

Apologies: Ethan Thomson (UC), James Kaklamanos (Merrimack), Karim Tarbali (UC), Mark Stirling (Otago), Reagan Chandramohan (UC), Romain Meite (UA), Daniel Lagrava (UC),

25 May 2017 (9:00-10:30am NZT, web link:<https://canterbury.zoom.us/j/374852384>**)**

Purpose: To coordinate and share research activities on, and related to, 2017 QuakeCoRE GMSV research projects

Agenda:

- Elaboration on purpose of web conference (Brendon Bradley, ~5 minutes)
- Plans and Progress of "Examination of ground motion simulation uncertainties for the 2010 Mw7.1 Darfield and 2011 Mw6.2 Christchurch, New Zealand earthquakes" (Hoby Razafindrakoto, 15min)
- Discussion (All, ~5 minutes)
- Plans and Progress of "Akatore Fault: Earthquake parameters for ground motion simulations in Dunedin" (Mark Stirling, 15min)
- Discussion (All, ~5 minutes)
- Plans and Progress of "Real-time ground motion simulation and extraction of simulated motions from the "SeisFinder" Database" (Daniel Lagrava, 15min)
- Discussion (All, ~5 minutes)
- Plans and Progress of "Initiation of simulation-based PSHA (Cybershake) for the Canterbury region" (Karim Tarbali, 15min)
- Discussion (All, ~5 minutes)
- General Discussion (All, ~10 minutes)

Participants: Brendon Bradley (UC), Ahsan Nazer (UC), Chris de la Torre (UC), Chris McGann (UC), Connor Hayden (UA), David Dempsey (UA), Ethan Thomson (UC), Hoby Razafindrakoto (UC), James Kaklamanos (Merrimack), Karim Tarbali (UC), Liam Wotherspoon (UA), Mark Stirling (Otago), Rebecca McMahon (UA), Reagan Chandramohan (UC), Ricardo Tabora (Memphis), Romain Miete (UA), Robin Lee (UC), Sung Bae (QuakeCoRE), Daniel Lagrava (UC), Seokho Jeong (QuakeCoRE)

Apologies:

23 March 2017 (9:00-10:30am NZT, web link:<https://canterbury.zoom.us/j/374852384>)

Purpose: To coordinate and share research activities on, and related to, 2017 QuakeCoRE GMSV research projects

Agenda:

- Elaboration on purpose of web conference (Brendon Bradley, ~5 minutes)
- Progress of "Ground motion simulations for Hauraki rift earthquakes" (David Dempsey / Jeremy Riffault, 15min)
- Discussion (All, ~5 minutes)
- Invited: "Site Response Implications Associated with Common Methods used to Account for Vs Profile Uncertainty" (David Teague, 15min)
- Discussion (All, ~5 minutes)
- Progress of "Modelling topographic effects in regional ground motion simulation" (Ricardo Tabora and Seokho Jeong, 15min)
- Discussion (All, ~5 minutes)
- Progress of "Real-time ground motion simulation and extraction of simulated motions from the "SeisFinder" Database" (Brendon Bradley, 15min)
- Discussion (All, ~5 minutes)
- General Discussion (All, ~10 minutes)

Participants: Brendon Bradley (UC); Seokho Jeong (QuakeCoRE/UC); Robin Lee (UC); Hoby Razafindrakoto (UC); Ahsan Nazer (UC); Jim Kaklamanos (Merrimack); Ethan Thomson (UC); Liam Wotherspoon (UA); Connor Hayden (UA); Ricardo Tabora (Memphis); Rebecca McMahon (UA); Reagan Chandramohan (UC); Manesh Malla (UC); Mehrdad Hosseini (AECOM); Chris McGann (UC); David Dempsey (UA); Jeremy Riffault (UA); David Teague (Texas); Daniel Lagrava (UC); Viktor Polak (QuakeCoRE)

Apologies:

23 February 2017 (9:00-10:30am NZT, web link:<https://canterbury.zoom.us/j/374852384>)

Purpose: To coordinate and share research activities on, and related to, 2017 QuakeCoRE GMSV research projects

Agenda:

- Elaboration on purpose of web conference (Brendon Bradley, ~5 minutes)
- Progress of "Nelson-Tasman Site Characterisation Study - Data collection and plans for 2017" (Rebecca McMahon, ~15 minutes)
- Discussion (All, ~5 minutes)
- Progress of "Developing a Data-driven Vs30 Model for New Zealand Engineering Researchers and Practitioners" (Kevin Foster, ~15 minutes)
- Discussion (All, ~5 minutes)
- Progress of "Incorporating soil nonlinearity into physics-based simulations through site-specific response analyses" (Chris de la Torre, ~15 minutes)
- Discussion (All, ~5 minutes)
- General Discussion (All, ~30 minutes)

Participants: Liam Wotherspoon (UA); Chris de la Torre (UC); Kevin Foster (UC); Rebecca McMahon (UA); Ethan Thomson (UC); Ahsan Nazer (UC); Chris McGann (UC); Jeff Fraser (Golder); Hoby Razafindrakoto (UC); Connor Hayden (UA); David Dempsey (UA); Seokho Jeong (UC); Andreas Skarlatoudis (AECOM).

Apologies: Brendon Bradley, Paul Somerville