

AEES 2014

Australian Earthquake Engineering Society Conference

21-23 November, 2014

Cumberland Lorne Resort
Lorne, Victoria



SEISMOLOGY
RESEARCH
CENTRE



Australian Government
Geoscience Australia



WELCOME

AEES President, Professor Paul Somerville, and the AEES Committee look forward to welcoming you to Lorne, Victoria, Australia to attend the 2014 Australian Earthquake Engineering Society Conference. The conference will be held at the Cumberland Lorne Resort over three half days commencing at 1pm on the Friday (registration will open at 12nn) and concluding at 1.15pm on the Sunday.

There will be conference dinners on both Friday evening (at Mantra Lorne) and Saturday evening (at the Cumberland Lorne Resort).

There will also be an afternoon trip to the 12 Apostles on the Saturday afternoon. Or perhaps you might like to bring the family and take a surfing lesson or a kayak trip? There are also bush walking opportunities aplenty and the Otway Fly if you feel like soaring through the treetops! Or perhaps a spot of shopping in Lorne's main strip.

A meeting of Australian Seismologists is scheduled for Friday prior to the conference at the Cumberland Lorne Resort and the AEES AGM will also be held during the conference.

Our keynote speakers this year are:

Dan Clark, Earthquake Geologist, Geoscience Australia

Helen Goldsworthy, Associate Professor, Department of Infrastructure Engineering, University of Melbourne

John Hare, Technical Director, Holmes Consulting & Principal Engineer, Canterbury Earthquake Recovery Authority, New Zealand

Peter McBean, Joint Managing Director, Wallbridge & Gilbert

We will have a blend of keynote speakers, oral presentations and poster presentations.

Each poster presenter will be given the opportunity for a short oral presentation within the main program and will be asked to attend their poster during breaks. All abstracts will be published in the conference proceedings and full papers will be provided to each participant on CD/USB.

There will be an **Australian Seismologists meeting** held at the conference venue) on Friday 21 November, from 8.30-11.30am before the full conference commences for those interested in attending. There is no cost however please indicate your intention to attend on the conference registration form. For further information please contact David Love at david.love@sa.gov.au.

KEYNOTE SPEAKERS

Dan Clark



Dr Dan Clark gained his PhD in hard rock geology and geochronology in 1999 from the University of New South Wales, Sydney, Australia. He was then employed as an Engineering Geologist with Connell Wagner conducting geotechnical investigations for foundation and tunnel design before joining Geoscience Australia (GA) in 2001. Since joining GA, he has retrained as an Earthquake Geologist specialising in the fields of palaeoseismology and Quaternary geology and geomorphology. He has investigated numerous Quaternary faults across Australia and has been instrumental in the development of models describing large earthquake occurrence in intraplate regions. Current research focuses on incorporating this knowledge into national earthquake hazard maps for engineering design, and site specific earthquake hazard studies.

Helen Goldsworthy



Dr. Helen Goldsworthy is an Associate Professor in the Department of Infrastructure Engineering at the University of Melbourne, Melbourne, Victoria, Australia. She received her BEng (Hons1) from the University of Adelaide (1981), her MSc from the University of Illinois at Urbana-Champaign (1982), and her Ph.D. from the University of Melbourne (1990). She practiced in San Francisco in the early 1980s in the firm Skidmore, Owings and Merrill. She is a member of the national committee of the Australian Earthquake Engineering Society and represented the society in Christchurch in the aftermath of the February 22nd 2011 earthquake. Her research interests include the seismic design and assessment of buildings.

John Hare



John Hare is a structural engineer and a Director of the Holmes Group of companies. He has worked in NZ, UK and the US, where he established a Holmes office in San Francisco in 2000. Since 2006 he has been based again in Christchurch, where he originally commenced practice in 1985.

John is a Fellow of the Institution of Professional Engineers of New Zealand and the New Zealand Earthquake Engineering Society. He is also the immediate Past President of the NZ Structural Engineering Society and is the chair of the commercial workstream of the Ministry of Business, Innovation and Employment's Engineering Advisory Group, established since the Canterbury Earthquakes. Following the February 2011 earthquake, John was acting as Principal Engineering Adviser, firstly to Civil Defence and subsequently to the Canterbury Earthquakes Recovery Authority. In March 2013, John was awarded the Fulton-Downer gold medal from IPENZ for public service, as a result of his activities over the previous two years.

Peter McBean



Peter McBean is a consulting structural engineer with 30 years' seismic design experience. He is joint Managing Director of the Wallbridge & Gilbert/Aztec Analysis group and a Fellow of Engineers Australia. Peter is currently the Vice President of AEES and a member of Australian Standards Committee BD6/11 "Earthquake Actions in Australia". Peter's particular interests include structural dynamics, earthquake engineering and Urban Search & Rescue (USAR). In 2011 Peter spent 2 weeks in Christchurch as an Australian USAR Task Force Engineer providing structural advice to rescue teams. He is currently the Structural Engineering Design Director for the \$1.85 billion New Royal Adelaide Hospital.



SOCIAL EVENTS

Friday 21 November – Welcome Reception



A great way for AEES members and non-members alike to meet up and get to know each other at this casual Aussie bbq at the Mantra Lorne Resort. Mantra is located right on the beach and, weather permitting, we'll dine outdoors to the sounds of waves crashing nearby. The Mantra is walkable from other central Lorne accommodation. Partners and children most welcome.

Saturday 22 November – Conference Dinner



Join us for the official conference dinner at the Cumberland Lorne Resort. We will have drinks on the balcony overlooking Lorne beach and then experience a dinner with a theatrical twist where the food preparation is part of the entertainment... Partners and children very welcome.

OPTIONAL TOURS

Saturday 22 November – The Twelve Apostles



Come for a drive along the spectacular Great Ocean Road to witness the rugged splendour of the famous 12 Apostles off the shore of the Port Campbell National Park. These eight massive limestone stacks (five have fallen since their discovery), rise up majestically 45 metres from the Southern Ocean and are surrounded by majestic cliffs. The drive takes approximately 2 hours each way but is picturesque and relaxing and the view of the Apostles is worthy of the journey.

Airport Transfers

For those joining us from interstate or overseas, we will be organising a bus transfer service from Tullamarine airport to Lorne exclusively for AEES delegates and their partners/families on Thursday 20 November (departing between 3-6pm) and Friday 21 November (departing by 10.45am) and a service will run from Lorne to Tullamarine airport on Sunday 23 November (departing at 1.30pm). The cost is \$41pp each way and you must register early for this service on the registration form to secure a seat. You should also advise your flight number and arrival time in the comments section of the registration form.



TRAVEL

By Air

If joining us from interstate or overseas, fly into Tullamarine or Avalon airport (Jetstar flies to both Tullamarine and Avalon). Travel time from Tullamarine airport to Lorne is approximately 2 hours and from Avalon airport travel time is approximately 1 hour 15 minutes. An airport shuttle service will be organised from Tullamarine airport.

By Hire Car from Tullamarine Airport

Take the Western Ring Road (M80) south to the Princes Highway (M1), then head to Geelong. From Geelong take the Great Ocean Road (B100) through Torquay to Lorne. **OR** Take the Western Ring Road (M80) south to the Princes Highway (M1), then head to Geelong. Instead of turning off to Geelong, continue along the Princes Highway (A1) to Winchelsea then take S151 via Deans Marsh to Lorne.

By Public transport from Tullamarine Airport

Take the Skybus to Spencer Street Railway Station in central Melbourne, then connect to V-line train/coach service to Geelong and the Great Ocean Road/Lorne. Skybus – 03 9335 3066. **OR** Take the bus with Gull Airport Service to Geelong, then connect to Geelong Railway station to take the V-line coach service along the Great Ocean Road to Lorne. Gull Airport Service – 03 5222 4966.

Transport from Avalon Airport

Avalon Airport is located off the Princes Highway (M1) approximately 35-40 minutes from Melbourne CBD. Geelong CBD is just 19km from Avalon (approx. 20-25mins by car). Car rentals are available from Avalon airport. Taxi fare from Avalon to Geelong is approximately \$30.

By car from Avalon, the directions are the same as from Melbourne CBD except the journey will be approximately 35-40 minutes quicker.

A bus service travels from the airport along the Princes Highway (M1), to Geelong Railway Station. Then take the V-line coach service along the Great Ocean Road to Lorne.

By Car (from Melbourne CBD)

Picturesque but windy route (avoid if car sickness a problem!) along Great Ocean Road (approx. 2hrs): Follow the Princes Highway (M1) from Melbourne to Geelong then take the Great Ocean Road (B100) through Torquay to Lorne. You can also follow the Anglesea Road and avoid Torquay if you wish (this would save approx. 10-15mins) **OR** for the most direct route (approx. 2hrs 10mins – quite a few road works between Geelong & Winchelsea at the moment): Follow the Princes Highway (M1) from Melbourne, don't turn off at Geelong and continue on to Winchelsea (A1). Then take C151 via Deans Marsh to Lorne. A little windy at the end but straight roads the rest of the way.

By Public Transport from Melbourne CBD

V-line train/coach services depart daily from Melbourne to Geelong and along the Great Ocean Road to Lorne. To enquire call V-line on 136196

ACCOMMODATION



Self-contained apartment style accommodation is available at the conference venue, the **Cumberland Lorne Resort**. The Cumberland is located at the end of the shopping strip directly opposite the beach. The resort has an indoor swimming pool, tennis & squash courts and a gym.

We have negotiated special conference rates at the Cumberland. To book simply go to www.cumberland.com.au and click on the 'check availability' button in the right hand corner. Then enter your arrival date. Enter the promotional code 'AEES' into the promotional code field in the right hand corner and click 'apply'. You will then be able to book your accommodation. To confirm your booking please ensure you click the 'book now' button and have received an email confirmation. If you require any assistance, please contact Louise Harvey on 03 5289 4457 or by email res@cumberland.com.au

We recommend you **book before 30 October** to guarantee availability. Our block of rooms may be released to the general public after this date.

Rates

1 bedroom apartment (incl bfast for 1)	\$196.50
1 bedroom apartment double share (incl bfast for 2)	\$223.00
2 bedroom apartment (incl bfast for 2)	\$283.00
2 bedroom apartment (incl bfast for 3)	\$309.50

Other options



We also recommend **Mantra Lorne Resort** for 5-star accommodation. The Mantra has an indoor swimming pool, gymnasium, sauna, tennis courts, day spa. Mantra offers hotel style rooms in the older part of the property or modern self-contained apartments in the new sections. It is located right on the beach. See <http://www.mantralorne.com.au> for further information & mention AEES when booking.

There are also various accommodation sites which offer discounted/special rates. Try the following to compare:

www.trivago.com.au
www.expedia.com.au
www.wotif.com
www.quickbeds.com
www.lastminute.com.au

www.stayz.com.au
www.needitnow.com.au
www.hotelscombined.com.au
www.tripadvisor.com.au