Australasian Workshop on Emergent Quantum Matter 2014

http://www.physics.uq.edu.au/people/mdavis/Straddie2014/

Book of Information



Photo: view south from Point Lookout of Main Beach (Jan Zill)



Photo: view west of Cylinder Beach (Simon Haine)

Monday 24 November - Friday 28 November 2014

Moreton Bay Research Station, The University of Queensland Dunwich, North Stradbroke Island, Queensland, Australia.

Program committee: Matthew Davis (UQ), Kris Helmerson (Monash), Elena Ostrovskaya (ANU), Ben Powell (UQ), Chris Vale (Swinburne), Andy Martin (Melbourne), Michael Fuhrer (Monash), Alex Hamilton (UNSW)

Local organisers (UQ): Matthew Davis, Karen Kheruntsyan, Michael Bromley, Ben Powell, Halina Rubinsztein-Dunlop, Tod Wright.

An Australian workshop of ICAM-I2CAM Institute for Complex Adaptive Matter: http://icam-i2cam.org/

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Welcome to Queensland!

We welcome you to Minjerribah (North Stradbroke Island) in Queensland, Australia for this Australasian Workshop on Emergent Quantum Matter 2014. The indigenous Australians of this area are the Quandamooka people and we show our respect and acknowledge the traditional custodians of this land, of their elders past and present, on which this event takes place.

Stradbroke Island has Naree Budjong Djara National Park www.nprsr.qld.gov.au/parks/naree-budjong-djara/ (which means `My Mother Earth'). See map at end of this booklet. North Stradbroke Island is home to rare and endangered flora and fauna, and we ask that you take care of it especially when sightseeing. There are 18 species of native land mammals on the island as well as reptiles that include some poisonous snakes (which are more active in the mornings/evenings).

Some quick tips about visiting Queensland:

- It can be HOT and the UV is extreme at this time of year. Don't forget sunscreen and a hat. The highs for next week are predicted to be around 29 Celsius.
- Might be useful to bring an umbrella too as there are good chances of thunderstorms (possibly severe). http://www.bom.gov.au/qld/forecasts/manly.shtml
- It is probably a good idea to bring earplugs for shared accommodation. Also the birds can be very noisy from sunrise about 4:30am! (we don't have daylight savings time in Queensland)
- Swimming in the ocean is fabulous but can be dangerous. Don't go alone. Beware of strong surf (on the ocean facing beaches) and currents (even on the bay facing beaches). Sharks are known to live in the surrounding ocean waters, and there is a shark net for swimming at Amity Point.

Transport to/from Airport-Cleveland-Workshop

We have arranged for buses to/from the Brisbane **domestic** airport terminal:

Monday 24 November: Depart 9:30am from BNE domestic. Catch 10:55am water taxi to Dunwich.

Friday 28 November: Depart 2:25pm water taxi from Dunwich, ~ 3:00pm from Cleveland. Should arrive at BNE domestic before 4:30pm. Domestic flights after 5:30pm should be safe.

If you wish to make use of this, please arrange your flights to make these times. This is mainly aimed at participants traveling from within Australia – however if you can make international flights work with these times, we can pick you up from the international terminal on the way. (Please allow an hour after your flight arrives to get through customs and immigration).

Your ferry ticket as a walk-on passenger has been arranged for and paid for by the workshop with Stradbroke Ferries. If you will be picking up a water taxi ticket and not on the 10:55am sailing, say you are with the "University of Queensland conference" and they should give you a return ticket. Jake Glidden from UQ will be handing out tickets for the Monday 10:55am sailing.

Stradbroke Ferries - Vehicle Ferry and Water Taxi. www.stradbrokeferries.com.au.

We have tickets with this company (which used to be operate as Big Red Cat) which operates two services (car and passenger) both from the terminal at 3 Emmett Drive, Cleveland, and travels to the Harold Walker Jetty at Junner Street in Dunwich (**this is to the south of the UQ Research Station**). If you are going to take a vehicle to Stradbroke Island, you will need to book and pay for this yourself.

[Note that there is another ferry - Stradbroke Flyer - www.flyer.com.au. This water taxi operates from the end of Middle Street, Cleveland, from the yellow and blue building, and travels to One Mile Jetty, next to the Little Ships Club in Dunwich (this is to the north of the UQ Research Station). They offer free bus transfers to and from Cleveland train station and Cleveland's central shopping district to those who are traveling on their service. We do not have tickets arranged with this company.]

Other Transport to/from Cleveland - If you cannot make the planned crossing, Cleveland is driving distance from both Brisbane City and the Gold Coast, and is also serviced by public transport. Queensland Rail train services operate frequently from Brisbane departing from Central or Roma Street Stations and traveling to the Cleveland station. From here buses operate to both ferry terminals. Download the latest Queensland Rail 'Cleveland Line' timetable here: http://translink.com.au/sites/default/files/assets/timetables/140120-cleveland.pdf

There are regular ferries approximately on the hour between Cleveland and Dunwich. There are two water taxi companies (passenger ferries) operating to North Stradbroke Island. Travel time 25 minutes, and generally is not too rough of a ride across the Moreton Bay.

Travel for international participants

If you are traveling from outside Australia for the workshop, you may need to arrive on Sunday 23 November. It is probably easiest to either stay somewhere in central Brisbane, and then take the train from Central Station on Monday morning to Cleveland, where it is a 2km, ie. 25ish minute walk to the ferry terminal (see map at the end of this booklet), or you can take bus 258 and get off at Toondah Harbour.

There are accommodation options in Cleveland as well: see here: http://www.tripadvisor.com.au/Hotels-g494983-
Cleveland Redland City Greater Brisbane Queensland-Hotels.html#MAPVIEW
You can then avoid having to travel from the CBD on the Monday.

Other details about getting to the research station if you need to do it on your own are here: http://www.uq.edu.au/moreton-bay-research-station/planning-your-visit http://www.stradbrokeferries.com.au/

Brisbane public transport

Translink: http://www.translink.com.au/ to work out travel options use the Brisbane Train/Bus network. Use their 'Journey Planner', search for "Central Station" to "Toondah Harbour, Cleveland". You can buy a 'Go card' at the airport train station or at newsagents etc.

If you are taking the train arriving at Cleveland at 10:20am on Monday: Ben Powell and Anthony Jacko will be on the same train, and looking out for physicists who seem a bit lost at Cleveland station.

Ben Powell



Anthony Jacko



Laboratory Tour - If you are interested in visiting The University of Queensland following the workshop, then please get in touch with the organisers.

Dunwich/Island Facilities

Supermarket - Dunwich Foodworks (5 Stradbroke Place, Dunwich) Open: Mon-Fri 6:00am – 5:30pm.

Pharmacy - Stradbroke Pharmacy (2/11 Ballow Rd, Dunwich)

Doctor/General Practioner - Stradbroke Island Medical Centre (4 Kennedy Drive, **Point Lookout**) Open: Monday – Friday 8.30am to 5pm. Note that if you need to see a GP please talk to the organisers as the UQ crew will have a number of cars brought over on the Ferry.

Medical Centre - (24 hour emergencies) Marie Rose Centre (36 Oxley Parade, Dunwich) http://www.health.qld.gov.au/services/metrosouth/dunwich.asp

Open: Monday - Saturday 9am to 12pm and Sunday 9am to 10am.

The facility provides triage, care, and transfer of patients to mainland facilities in conjunction with Queensland Ambulance Service as appropriate. During business hours, the centre is staffed by a Queensland Health nurse. After hours, a nurse is 'on-call' for emergencies.

Taxi - Stradbroke Cab Service (0408 193 685). There are apparently 2 taxis on the island.

Pubs - 1. Little Ship Club http://www.littleshipclub.com.au/ (1 Yabby Street, Dunwich). Specialty dishes, local seafood, pasta, steak, roast & vegetarian. Fantastic views of the bay at sunset. Monday 11am-6pm, Tuesday 11am-6pm, Wednesday 10am-8:30pm, Thursday 10am-8:30pm Friday 10am-10:00pm

Pubs - 2. North Stradbroke Island Rugby League & All Sports Club (cnr Cunningham and Ballow Roads Dunwich). Unknown opening hours.

Pubs - 3. RSL Memorial Club (Mallon Street, Dunwich) Unknown opening hours.

Other Food:

- CJ's Island Pizza pizzas including seafood, meat and vegetarian with gluten free options. Open for dinner. Take-away.
- Skips First Stop Takeaway & Convenience Store
- Island Fruit Barn (Bingle Road, Dunwich). A range of homemade cakes, delicious breakfasts and lunch meals, fresh fruit and vegetables.
- RSL Memorial Club East Coast Cafe (Mallon Street, Dunwich). Specializing in Asian cuisine with dine in or takeaway available.
- Stradbroke Island Bakery
- Stradbroke Island Butchery

Festival - Straddie Sharks Original Oyster Festival & Mud Crab Festival Saturday November 29th 10:00 am - 6:00 pm. FREE ENTRY Prawn & Oyster Eating Comps & Mud Crab Races, Jumping Castle | Market Stalls | Food & Drinks Ron Stark Oval, Dunwich.

Internet access (eduroam, UQ visitor)

A wireless eduroam network will be available at the Moreton Bay Research Station. Most Australian/NZ university staff and students should have access to this - please set it up for your device before you leave for Brisbane. (see our http://uqconnect.net/helpdesk/wireless/eduroam/ setup guides for the configuration at UQ). The technical info for our eduroam system is:

Network SSID: **eduroam** (all lowercase)

Security: **802.x EAP**

EAP Method: TTLS
Phase 2 Authentication: PAP

CA certificate: **(unspecified)**User certificate: **(unspecified)**

Identify: **yourusername@uni.edu.xx** eg.s123456@uni.edu.xx

Anonymous Identity: **none**

Password: your password

Failing this, there will be a UQ visitor network available:

 $\underline{https://www.its.uq.edu.au/helpdesk/connecting-and-using-uq-visitor-wireless?pid=1395}$

Wednesday afternoon sightseeing

Wednesday afternoon will have free time. The plan is to travel to the township of Point Lookout and go to the beach/go on a walk/relax at a café (or go crazy sandboarding).

Lunch will be as normal 12.15pm – 1.15 pm. Chartered bus leaves to Pt Lookout at 1.30 pm.

We are suggesting three afternoon options, but feel free to organise others (eg. Visit Blue Lake)

- 1. Take 1.30 pm Chartered bus to Pt Lookout for the afternoon. Do **gorge walk**, have coffee / ice cream, walk back to Cylinder beach for a swim. It is a 20 min walk downhill (supposedly) to the Stradbroke Hotel / Cylinder Beach.
- 2. Take 1.30 pm Chartered bus Pt Lookout for the afternoon. Go to Cylinder beach for a swim, go **sandboarding** with http://www.straddieadventures.com.au/ near Cylinder Beach they suggested a session from 3-5pm. We need a minimum of 10 people to make this happen (and you will have to pay for this yourself).
- 3. Stay at the workshop location, catch up on **sleep/email/collaborate** and at your own leisure/cost catch the regular public bus from 1 mile jetty at either 2.25pm, 3.55pm or 4.55pm to the dinner at Pt Lookout [see next page for timetable information]. (if enough people stay we can arrange the courtesy van from the hotel can come and pick up 10 people at a time.)

Workshop dinner

The registration fee covers all meals and catering at the research station for all workshop participants, as well as the workshop dinner. The workshop dinner will be at 6pm at the Stradbroke Hotel which is over at Pt Lookout.. The 1.30pm chartered bus will be provided from the research station at Dunwich – about a 20 min journey. The bus will take us back to Dunwich at 9.30pm. North Stradbroke Island is a relaxed location, and you will not be expected to dress up for the dinner – coming directly from the beach will be fine!

On arrival at Dunwich

There will be organisers there to meet you on arrival. It is about a 10 minute walk to the research station where the workshop is being held. There will be a couple of cars for anyone that needs luggage transfer. Once there, lunch will be served. Then there will be an induction at 1:00pm, after which you can check into your rooms, and the workshop will start at 2pm.

Last day clean up

We need to leave the research station as we found it, so please clean up your room to the standard it was when you arrived.

Bus around the island

http://www.northstradbrokeislandbuses.com/ has all the info, timetables are



STRADBROKE ISLAND BUSES

Bus Timetable, Effective Sept 2011

GOLD CATS FLYER TAXI Departs 1 Mile Jetty (next to cemetery)

Depart Pt Lookout to Dunwich	AM	6.50	7.50	8.50	9.50	10.50	PM	12.50	1.50	3.20	4.20	5.20	6.20
Depart Dunwich to Pt Lookout	AM	7.25	8.25	9.25	10.25	11.25	PM	1.25	2.25	3.55	4.55	5.55	6.55
Depart Amity to Dunwich	AM	6.50 School Days only	7.50	9.25 Via Pt Lookout	10.25 Via Pt Lookout		PM	1.25 Via Pt Lookout		3.55 Via Pt Lookout	4.55 Via Pt Lookout		
Depart Dunwich to Amity	AM			9.25	10.25		PM	1.25		3.55	4.55		
Depart Pt Lookout to Amity	AM			8.50 Via Dunwich	9.50 Via Dunwich		PM	12.50 Via Dunwich		3.20 Via Dunwich			

Allow 20 minutes from Water Taxis to Pt Lookout and Amity

Phone 3415 2417 Fax 3415 2418

Bus-Train-Water Taxis Trans Info 13 12 30

Email: straddybus@gmail.com Web: www.stradbrokebuses.com

CARDS ACCEPTED: QLD CENTRELINK; QLD SENIOR; QLD VET; QLD STUDENT



STRADBROKE ISLAND BUSES

Bus Timetable, Effective Sept 2011

STRADBROKE FERRIES - Depart Dunwich Jetty

Depart Pt Lookout to Dunwich	AM	6.50	7.50	8.50	9.50	10.50	PM	12.50	1.50	3.20	4.20	5.20	6.20
Depart Dunwich to Pt Lookout	AM	7.25	8.25	9.25	10.25	11.25	PM	1.25	2.25	3.55	4.55	5.55	6.55
Depart Amity to Dunwich	AM	6.50 School Days only	7.50	9.25 Via Pt Lookout	10.25 Via Pt Lookout		PM	1.25 Via Pt Lookout		3.55 Via Pt Lookout	4.55 Via Pt Lookout		
Depart Dunwich to Amity	AM			9.25	10.25		PM	1.25		3.55	4.55		
Depart Pt Lookout to Amity	AM			8.50 Via Dunwich	9.50 Via Dunwich		PM	12.50 Via Dunwich		3.20 Via Dunwich			

Allow 20 minutes from Water Taxis to Pt Lookout and Amity

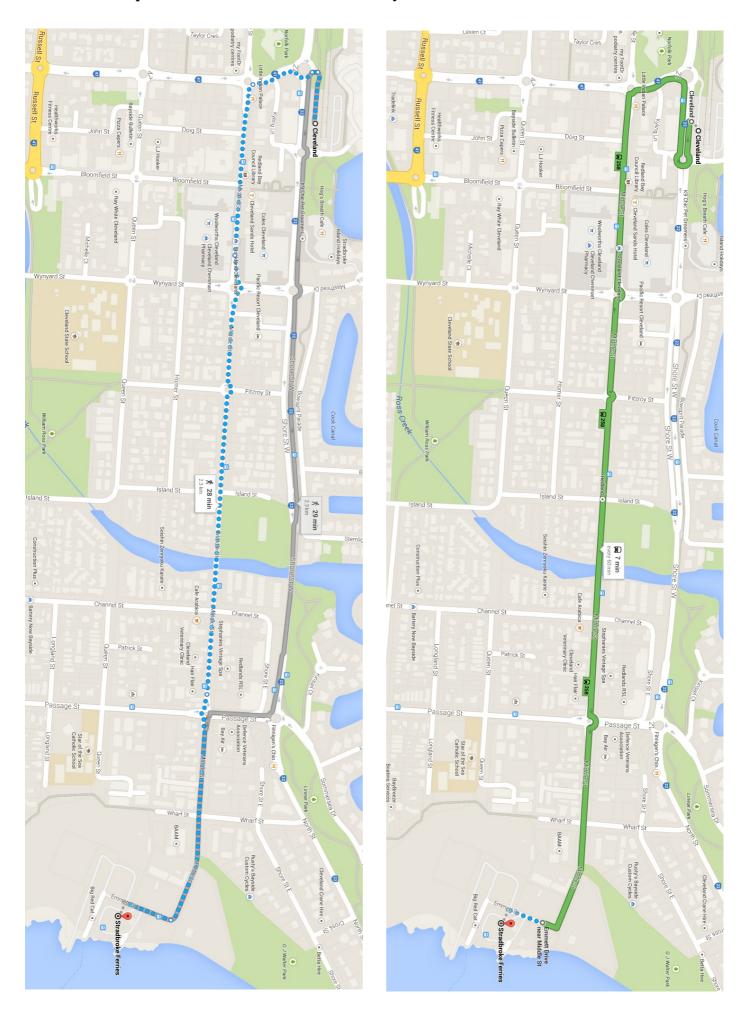
Phone 3415 2417 Fax 3415 2418

Bus-Train-Water Taxis Trans Info 13 12 30

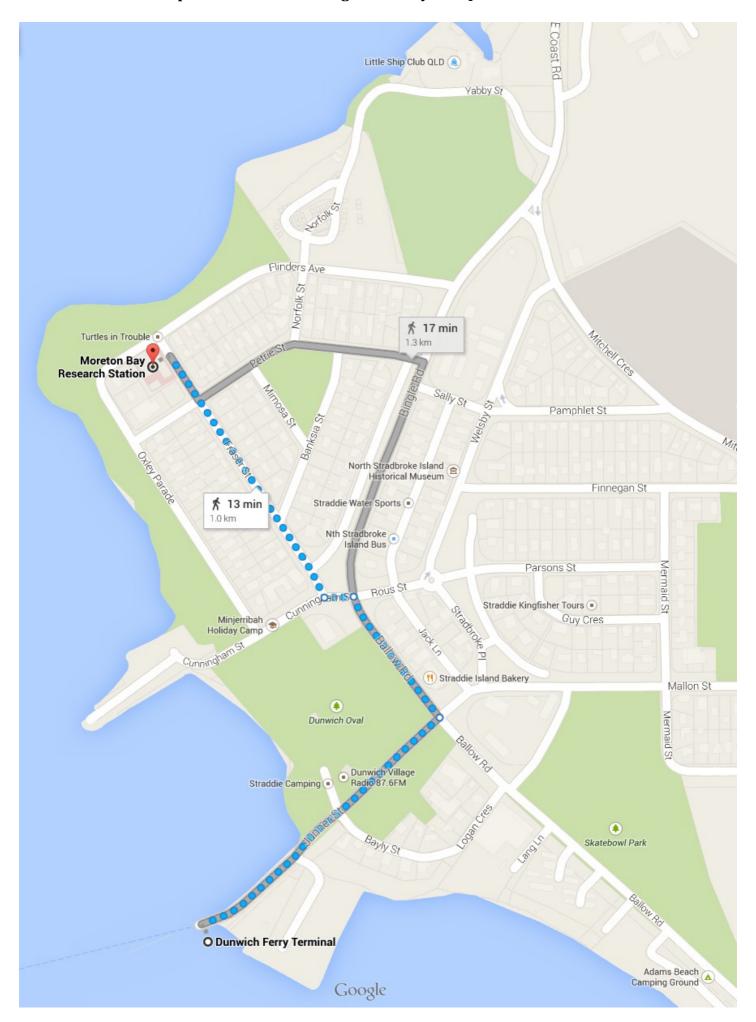
Email: straddybus@gmail.com Web: www.stradbrokebuses.com

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Map of Cleveland Train Station to Ferry: 2km walk or 7 min on 258 bus



Map of Dunwich. Walking from ferry to UQ Research Station



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