

Lincoln Laboratory Quantum Teleportation from Space (QTS) Workshop

28 March 2018



ATTENDEE PACKET



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Lincoln Laboratory Quantum Teleportation from Space (QTS) Workshop



Q T S F L Y E R

Shape a space-based quantum network satellite pathfinder program to address national security challenges with a community of US Government stakeholders

28 March

**MIT Lincoln Laboratory
Conference Room C-302
244 Wood Street
Lexington, MA 02420**

Workshop Office:

Dr. Barry Geldzahler (NASA)

Prof. Paul Kwiat (UIUC)

Dr. Scott Hamilton (MIT LL)

Contact:

Ms. Terri Welch

781-981-7670

terri.welch@ll.mit.edu

<https://conferences.ll.mit.edu/qts/>

Dear Colleague,

We are pleased to invite you to NASA's Quantum Teleportation from **the Space Station** (QTS) Workshop which will be held on 28 March 2018 at MIT Lincoln Laboratory in Lexington, Massachusetts.

The major objective of this symposium is to reach out to US Government stakeholders to stimulate interaction and scope system applications and performance objectives for NASA's upcoming satellite-based quantum communication network demonstration.

The workshop will review a recent NASA architecture study that identifies a path to develop a multi-node space and ground system that achieves high rate quantum communication, entanglement distribution, and teleportation for applications including:

- Secure communications
- Precision measurements and sensing
- Distributed computing

Government stakeholders will also be invited to present related work and a round table discussion will be supported up to SCI classification levels.

We hope you can join us and very much look forward to your participation.





Lincoln Laboratory Quantum Teleportation from Space (QTS) Workshop



GENERAL INFORMATION

Welcome to MIT Lincoln Laboratory

If this is your first visit, the MIT LL Conference Room C-302 map enclosed will help familiarize you with the location of amenities and workshop events.

Security

Visitor badges are required in order to attend the workshop. Badges may be picked up at the registration desk.

No cameras, audio recording, or video recording are permitted at Lincoln Laboratory. You may bring wireless devices such as cell phones, laptops, and personal electronic devices (PEDs) into public areas of the Laboratory, but not inside the Auditorium. Please leave any devices with Bluetooth capabilities such as Apple watches, Fitbit trackers, and headsets in your car or hotel room.

Meals

A complimentary continental breakfast and lunch will be provided. Additional meal and snack options are available for purchase in the cafeteria.

Smoking

Lincoln Laboratory is a smoke-free facility. See workshop staff for the location of outdoor smoking areas.



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A G E N D A

Start	Stop		Topic	Speaker	Organization
8:00 AM	8:05 AM	5	MIT LL Host Comments	S. Hamilton	MIT LL
8:05 AM	9:00 AM	55	Welcome / Goals / Origins of Flight	B. Geldzahler	NASA SCan
9:00 AM	10:00 AM	60	SDT Technology Development	P. Kwiat	UIUC
10:00 AM	10:15 AM	15	BREAK		
10:15 AM	10:45 AM	30	Entanglement Source Technology	W. Grice	ORNL
10:45 AM	11:15 AM	30	SNSPD- Array Development	Matt Shaw (given by Matt Grein)	JPL
11:15 AM	12:00 PM	45	NASA Quantum Computing Efforts	E. Rieffel	NASA ARC
12:00 PM	12:45 PM	45	WORKING LUNCH: MIT LL Quantum Network Study	S. Hamilton	MIT LL
12:45 PM	2:15 PM	90	Quantum Network Pathfinder Impact	P. B. Dixon	MIT LL
2:15PM	2:30 PM	15	BREAK		
2:30 PM	3:00 PM	30	High-Availability Q Ground Terminals	M. Gruneisen	AFRL RD
3:00PM	4:00 PM	60	DISCUSSION	All	
4:00			ADJOURN		



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CONTACT INFORMATION

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VISIT REQUESTS AND SENDING CLEARANCES

Sending Collateral Clearances:

To send collateral SECRET or TOP SECRET clearances to MIT Lincoln Laboratory, a Government or contractor security office may either:

1. (Preferred) Enter JPAS visit requests (Lincoln's SMO code is 3G0506), or
2. Fax clearance certifications to 781-981-5588

* Note that the JPAS SMO code for passing collateral clearances is our CAGE CODE (3G050) plus the digit "6" at the end.

To verify that clearances have been received, call 781-981-7118.

Sending SCI Accesses:

To send certification of SCI accesses to MIT Lincoln Laboratory, a Government or Contractor Special Security Office may either:

1. (Preferred) Enter JPAS visit requests (Lincoln's SMO code is 3G0502), or
2. Fax accesses to 781-981-4441 (unclassified fax), or
3. Fax accesses to 781-981-4262 (STU III fax), or
4. Send accesses via SSO channels with the following PLA:

SSO ESC/INS (Pass to
CSSO.MIT/LINCOLNLABS)

Points of Contact

The points of contact in security for SCI visitor(s) are:

- Peter Dickhaut
Security Coordinator
Ph: 781-981-5102
dickhaut@ll.mit.edu
- Chad Jusseaume
Security Coordinator
Ph: 781-981-7196
jusseaume@ll.mit.edu

To verify that accesses have been received, call 781-981-512 or 781-981-7196.



Lincoln Laboratory

Quantum Teleportation from Space (QTS) Workshop



HOTELS, LOCAL RESTAURANTS & CAR SERVICE

Hotels

This list of hotels is for informational purposes only and includes a range of hotels, i.e., full service, mid-range, budget. The publishing of this hotel information does not constitute an endorsement or recommendation by Lincoln Laboratory.

Note: The hotels are ordered according to proximity to the Laboratory; the numbers do not imply any ranking of the hotels' quality, services, or amenities.

- 1. Hanscom Inn**
1427 Kirtland Street
(Bldg. #1425)
Bedford, MA 01731
781-225-4444
- 2. Element**
727 Marrett Road-B
Lexington, MA 02421
781-761-1750
- 3. Aloft**
727 Marrett Road-A
Lexington, MA 02421
781-761-1700
- 4. Hilton Garden Inn**
5 Wheeler Road
Burlington, MA 01803
781-272-8800
781-221-4605 (fax)
800-445-8667 (toll free)
- 5. Sonesta**
11 Old Concord Road
Burlington, MA 01803
781-221-2233
- 6. Hyatt Summerfield Suites**
2 Van De Graaff Drive
Burlington, MA 01803
781-270-0800
- 7. Boston Marriott**
Routes 95/128 & 3A
1 Burlington Mall Road
Burlington, MA 01803
781-229-6565
800-228-9290 (toll free)
- 8. Homestead Studio Suites**
40 South Avenue
Burlington, MA 01803
781-359-9099
800-804-3724 (toll free)
- 9. Candlewood Suites**
130 Middlesex Turnpike
Burlington, MA 01803
781-229-4300

Local Restaurants

- 1. Waxy O'Connor's**
Irish Pub
94 Hartwell Ave.
Lexington, MA 02421
(781) 861-9299
<http://www.waxys.com/locations/lexington/>
- 2. Margaritas Mexican Restaurant**
Mexican
438 Bedford St.
Lexington, MA 02420
(339) 970-2250
<https://www.margs.com/food-drink/lexington/>
- 3. Bertucci's**
Italian Fare & Pizzas
1777 Massachusetts Ave.
Lexington, MA 02420
(781) 860-9000
<http://www.bertuccis.com/locations/lexington>
- 4. Yangtze River Restaurant**
Chinese
Giroux Building, 25 Depot Sq.
Lexington, MA 02420
(781) 861-6030
<http://www.yangtzeriverlexington.com>
- 5. Red Heat Tavern**
Bistro Pub
152 Great Rd.
Bedford, MA 01730
(781) 538-4330
<http://www.redheattavern.com>
- 6. Del Frisco's Grille**
Steak & Seafood
92 Middlesex Turnpike
Burlington, MA 01803
(781) 365-2005
<http://www.delfriscosgrille.com>
- 7. The Cheesecake Factory**
American Chain
Burlington Mall, 75 Middlesex Tpk.
Burlington, MA 01803
(781) 273-0060
<http://www.thecheesecakefactory.com>
- 8. Tavern in the Square Restaurant**
American Pub
1 District Ave.
Burlington, MA 01803
(781) 272-9000
<http://www.taverninthesquare.com>
- 9. Tony C's**
Sports Bar & Grill
17 3rd Ave.
Burlington, MA 01803
(781) 238-8282
<http://www.tonyccsportsbar.com>
- 10. D'Angelo Grilled Sandwiches**
Deli Sandwiches
363 Great Rd.
Bedford, MA 01730
(781) 275-1333
<http://www.dangelos.com>
- 11. Panera Bread**
Bakery/Cafe & Sandwich's
1684 Massachusetts Ave.
Lexington, MA 02420
(781) 372-3246
<http://www.panerabread.com>
- 12. Dunkin' Donuts**
Coffee
286 Lincoln St.
Lexington, MA 02421
(781) 862-1553
<https://www.dunkindonuts.com>
- 13. Starbucks**
Coffee
60 Bedford St.
Lexington, MA 01803
(781) 863-1189
<https://www.starbucks.com>

Car Service

- 1. Corporate Coach & Limosine**
(877) 714-7433
info@corporatecoachlimosine.com
- 2. Bedford Cab & Coach**
227 Great Rd.
Bedford, MA 01730
781-275-5000



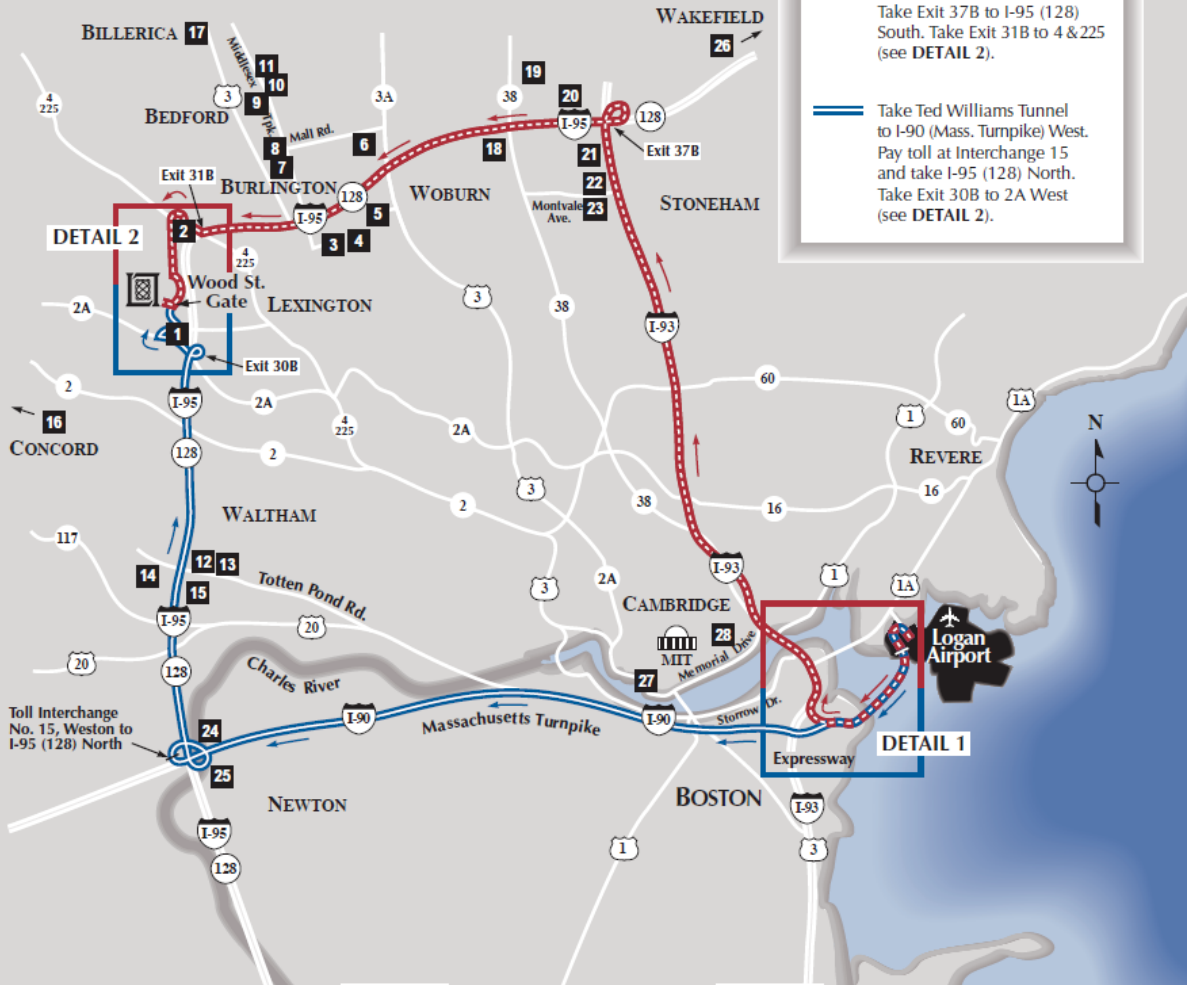
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DIRECTIONS FROM LOGAN AIRPORT

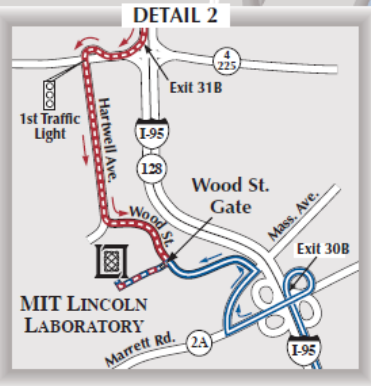
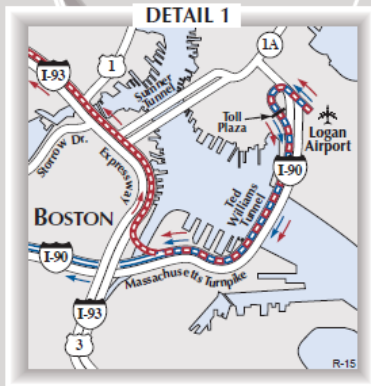
Reference Map

TO MIT LINCOLN LABORATORY FROM LOGAN AIRPORT



----- Take Ted Williams Tunnel to I-90 (Mass. Turnpike) West, then take Exit 24 to I-93 North. Take Exit 37B to I-95 (128) South. Take Exit 31B to 4 & 225 (see DETAIL 2).

===== Take Ted Williams Tunnel to I-90 (Mass. Turnpike) West. Pay toll at Interchange 15 and take I-95 (128) North. Take Exit 30B to 2A West (see DETAIL 2).

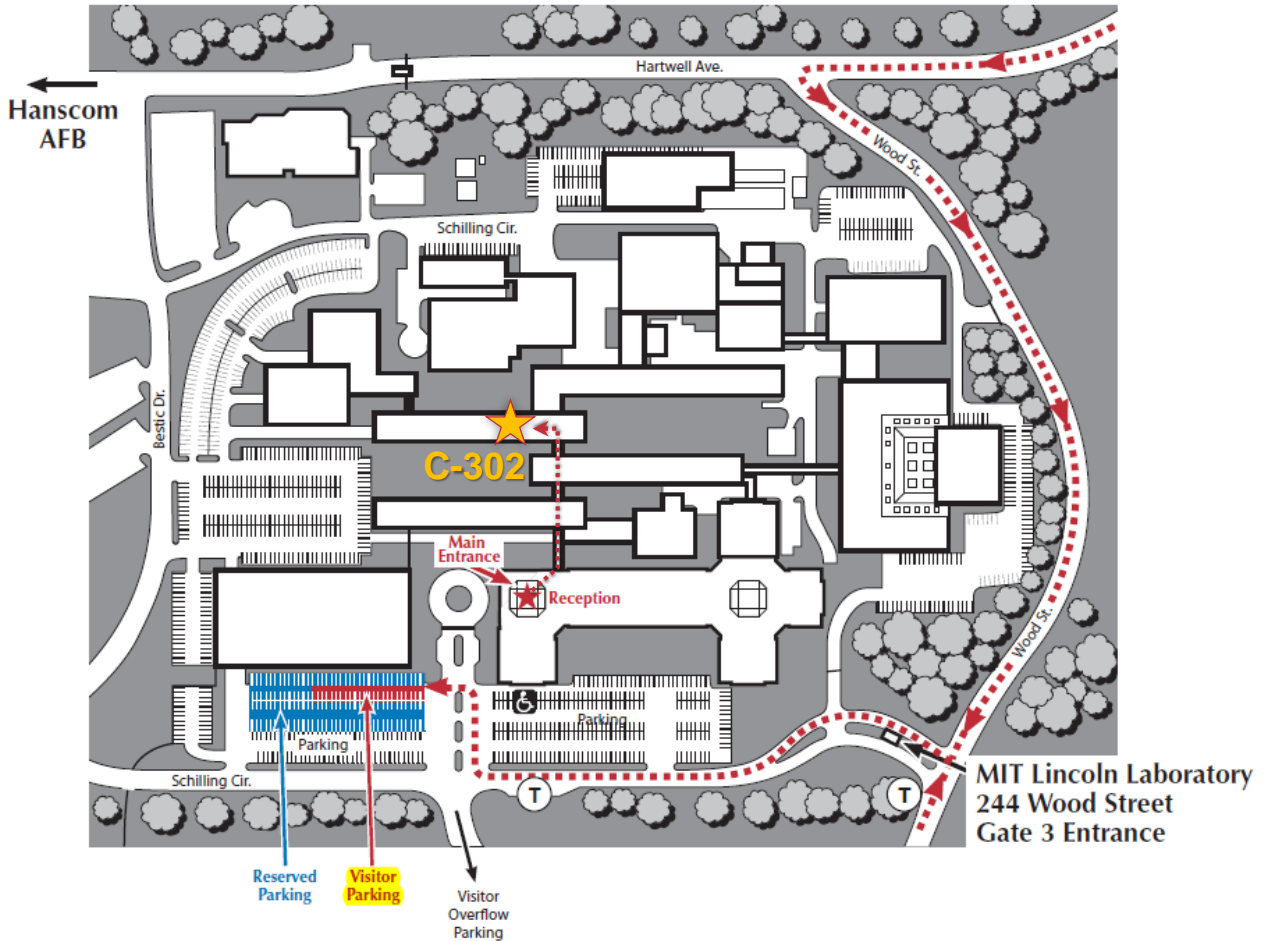




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VISITOR AND RESERVED PARKING



- ★ Reception; Main Entrance
- ▒ Workshop Parking
- ▒ Visitor Parking
- ♿ Accessible Parking
- Ⓣ MBTA Bus Stop