



# **Frontiers and Careers 2022**

## in Nuclear and Hadronic Physics

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08/05/2022

# Overview



1. Introduction

2. Schedule

3. Important information

# Introduction

The background features two large, overlapping geometric shapes. On the left, a teal-colored triangle points downwards and to the right. On the right, a light gray triangle points upwards and to the left. The two triangles meet at a point in the lower center of the frame.

# Introduction



Welcome to the **FRONTIERS AND CAREERS 2022** workshop!

**FRONTIERS AND CAREERS 2022** provides a platform to

- ▶ explore career prospects in academia and industry
- ▶ present and discuss your research
- ▶ network and develop professional connections

# Sponsors



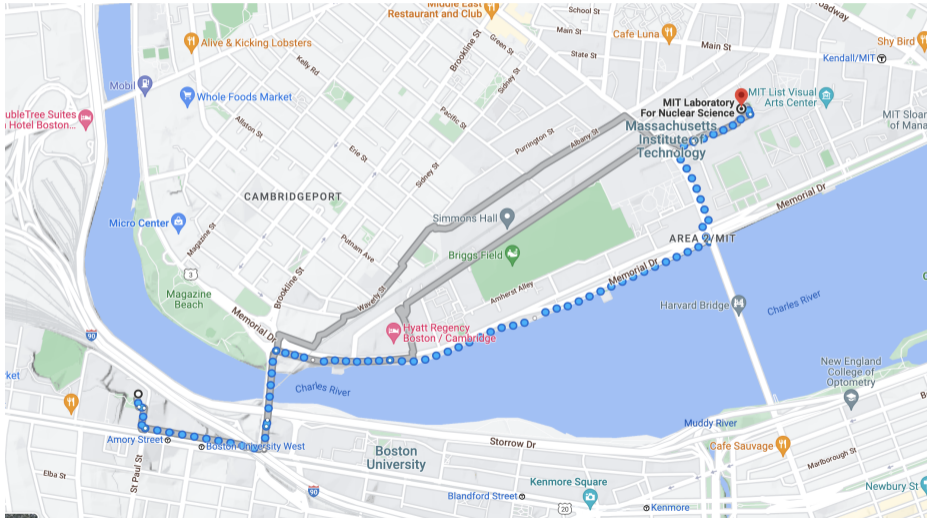
**FRONTIERS AND CAREERS 2022** is financially supported by

- ▶ George Washington University, Department of Physics
- ▶ MIT Laboratory for Nuclear Science
- ▶ University of Bonn, TRA Matter
- ▶ University of Mainz, Helmholtz-Institute Mainz
- ▶ Jefferson Lab Deputy Director for Science

We acknowledge travel support from the Junior Scientist Travel Fund.



# Workshop Location - From BU to MIT



# Workshop Location - MIT campus



# Workshop Location - Building 26 on the MIT campus



MIT, Building 26



MIT, Building 26, Entrance



Use your Tim ticket to enter the building  
Go to the Kolker room (4th floor)



# Schedule

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# Schedule

## Friday, 5th August 2022



09:00	<b>Breakfast</b>	
	26-414, MIT Laboratory for Nuclear Science	09:00 - 09:45
	<b>Welcome</b>	Farah Atzei et al.
	26-414, MIT Laboratory for Nuclear Science	09:45 - 10:00
10:00	<b>Pedagogical talk- Presenting data</b>	Lawrence Weinstein
	26-414, MIT Laboratory for Nuclear Science	10:00 - 10:30
	<b>Pedagogical talk- How to write Grant proposals?</b>	Evangeline Downie
	26-414, MIT Laboratory for Nuclear Science	10:30 - 11:00
11:00	<b>Coffee Break</b>	
	26-414, MIT Laboratory for Nuclear Science	11:00 - 11:30
	<b>Academic career in the US</b>	Bill Briscoe
	26-414, MIT Laboratory for Nuclear Science	11:30 - 12:00
12:00	<b>Academic career in the EU</b>	Reinhard Beck
	26-414, MIT Laboratory for Nuclear Science	12:00 - 12:30
	<b>Lunch</b>	
13:00		
	26-414, MIT Laboratory for Nuclear Science	12:30 - 13:30

	<b>Career perspectives in a Lab</b>	Dr Douglas Higinbotham
	26-414, MIT Laboratory for Nuclear Science	13:30 - 14:00
14:00	<b>Career perspectives in the Industry</b>	Kalyan Allada
	26-414, MIT Laboratory for Nuclear Science	14:00 - 14:30
	<b>Panel discussion</b>	
	26-414, MIT Laboratory for Nuclear Science	14:30 - 15:00
15:00	<b>CV session I</b>	
	26-414, MIT Laboratory for Nuclear Science	15:00 - 15:30
	<b>Coffee Break</b>	
	26-414, MIT Laboratory for Nuclear Science	15:30 - 16:00
16:00	<b>CV session II</b>	
	26-414, MIT Laboratory for Nuclear Science	16:00 - 16:20
	<b>Deuteron Charge Radius Experiment (DRad) at Jefferson Lab</b>	Jingqi Zhou
	26-414, MIT Laboratory for Nuclear Science	16:20 - 16:40
	<b>Two photon exchange at Jefferson Lab</b>	Tyler Kutz
	26-414, MIT Laboratory for Nuclear Science	16:40 - 17:00
17:00	<b>Soft-photon radiative corrections to the <math>e^+e^- \rightarrow p\bar{p}e^+e^- \rightarrow p^+p^-</math> process</b>	Niklas Keil
	26-414, MIT Laboratory for Nuclear Science	17:00 - 17:20
	<b>Experimental inputs to the Hadronic Light-by-Light Contribution to the Anomalous Magnetic Moment of the Muon from ...</b>	Max Lehmann
	<b>Small Angle Initial State Radiation Analysis of the Pion Form Factor at BESIII</b>	Ms Yasemin Scheffels
	26-414, MIT Laboratory for Nuclear Science	17:40 - 18:00
18:00		

# Schedule

## Saturday, 6th August 2022

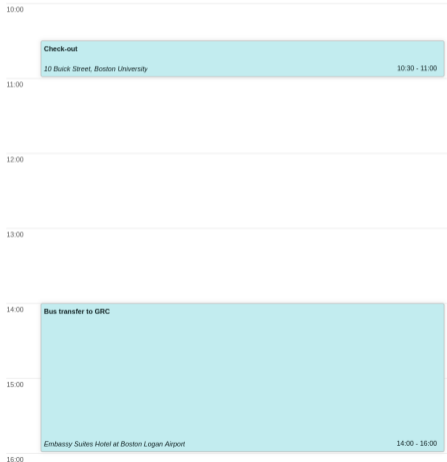


08:00	<b>Breakfast</b> 26-414, MIT Laboratory for Nuclear Science	08:30 - 09:00
09:00	<b>New Measurements of the EMC Effect at 12 GeV</b> 26-414, MIT Laboratory for Nuclear Science	Cameron Cotton 09:00 - 09:20
	<b>Testing the EMC-SRC Hypothesis with the BAND Experiment</b> 26-414, MIT Laboratory for Nuclear Science	Sara RaßB 09:20 - 09:40
	<b>Measurements and Simulations of <math>(e,e'n)(e,e'p)</math> in the Proton-Rich Nucleus <math>^3\text{He}</math></b> 26-414, MIT Laboratory for Nuclear Science	Erin Seroka 09:40 - 10:00
10:00	<b>SRC Scaling Below the Inclusive Limit</b> 26-414, MIT Laboratory for Nuclear Science	Andrew Denniston 10:00 - 10:20
	<b>Neutron-Proton Pair Dominance of SRC pairs with a Real Photon Beam</b> 26-414, MIT Laboratory for Nuclear Science	Phoebe Sharp 10:20 - 10:40
	<b>Preliminary results of Short-Range Correlations study in exotic nuclei at R3B</b> 26-414, MIT Laboratory for Nuclear Science	Hang Qi 10:40 - 11:00
11:00	<b>Coffee Break</b> 26-414, MIT Laboratory for Nuclear Science	11:00 - 11:30
	<b>SBS GMn Experiment</b> 26-414, MIT Laboratory for Nuclear Science	Provakar Datta 11:30 - 11:50
12:00	<b>Design, Calibration, and Performance of a Segmented, Sampling Hadron Calorimeter Employed in the Super BigBite Sp...</b> Sebastian Seeds	
	<b>GRINCH Gas Cherenkov Detector for SuperBigbite Spectrometer, Jefferson Lab</b> 26-414, MIT Laboratory for Nuclear Science	Maria Satrik 12:10 - 12:30
13:00	<b>Lunch</b> 26-414, MIT Laboratory for Nuclear Science	12:30 - 13:30

	<b>Determination of the polarization observables T,P and H in the reaction <math>\Sigma p \rightarrow \pi^+ p</math></b> 26-414, MIT Laboratory for Nuclear Science	Sebastian Czapka 13:30 - 13:50
14:00	<b>Experimental study of polarization observables in <math>\pi^0</math> and <math>\eta</math> photoproduction off quasifree nucleons</b> 26-414, MIT Laboratory for Nuclear Science	Nicolas Jermann 13:50 - 14:10
	<b>Feasibility Study of Ad Elastic Scattering in Data From Photoproduction Off Deuteron</b> 26-414, MIT Laboratory for Nuclear Science	Brandon Turnee 14:10 - 14:30
	<b>Measuring CLAS12 deuterium pion electro-production cross sections for <math>e^+n</math></b> 26-414, MIT Laboratory for Nuclear Science	Caleb Fogler 14:30 - 14:50
15:00	<b><math>\eta</math> meson photo-production at 9 GeV on nuclear targets at GlueX</b> 26-414, MIT Laboratory for Nuclear Science	Bo Yu 14:50 - 15:10
	<b>Spectroscopic analysis of exotic hadrons using effective theories</b> 26-414, MIT Laboratory for Nuclear Science	Ankush Sharma 15:10 - 15:30
	<b>Coffee Break</b> 26-414, MIT Laboratory for Nuclear Science	15:30 - 16:00
16:00	<b>Exploring proton in-medium modifications through polarization-transfer measurements</b> 26-414, MIT Laboratory for Nuclear Science	Tim Koker 16:00 - 16:20
	<b>Pion parton distribution functions within a light-front wave function approach</b> 26-414, MIT Laboratory for Nuclear Science	Simone Venturini 16:20 - 16:40
	<b>Diquarks in Nuclei: QCD effects in Nuclear Physics</b> 26-414, MIT Laboratory for Nuclear Science	Jennifer Rittenhouse West 16:40 - 17:00
17:00	<b>An overview of the MOLLER experiment at Jefferson lab</b> 26-414, MIT Laboratory for Nuclear Science	Devi Adhikari 17:00 - 17:20
18:00		
19:00	<b>Duck Boat tour</b> Prudential Center	18:30 - 19:50

# Schedule

Sunday, 7th August 2022



GRC buses leave at 12 pm, **2pm**, 4pm  
from **Embassy Suites Hotel** at Boston Logan Airport  
207 Porter Street, Boston, MA

Need to arrive **1 hour before departure!**

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Important information

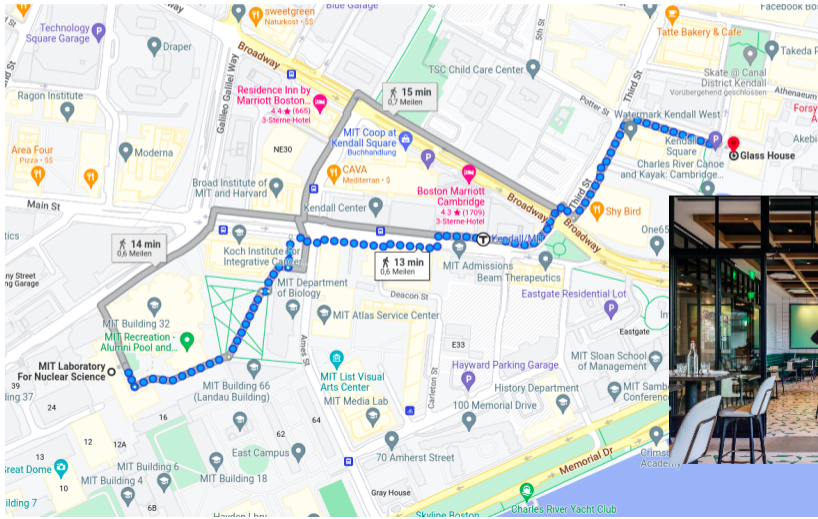
# Important information

## Social event- Workshop dinner



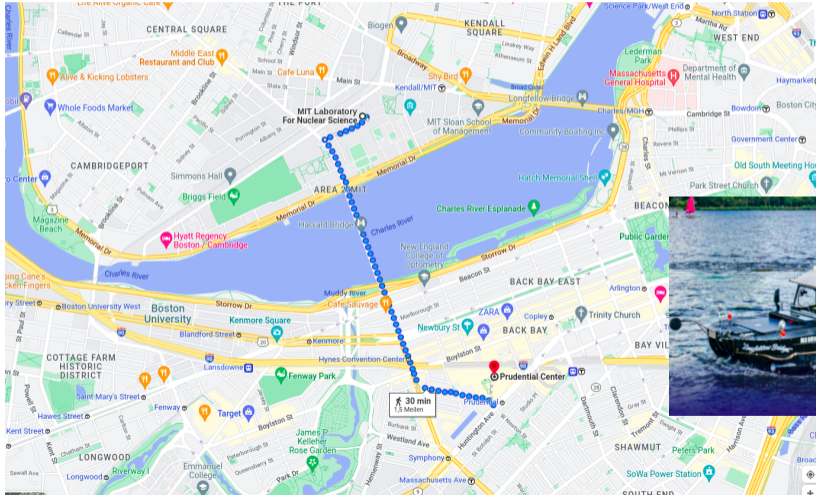
Friday, 6:30 pm

Glass House



# Important information

## Social event- Duck Boat tour



Saturday, 6:30 pm  
Starts and ends  
at Prudential Center



Enjoy the workshop!