

The 38th Annual Hampton University Graduate Summer Program

HUGS 2023

Jefferson Lab, Newport News, Virginia

May 30-June 16, 2023

All activities will be held in CEBAF Center unless otherwise noted. All lectures will be held in Room F113.

Note: this is a snapshot of the nearly final HUGS program as of 5/22/2023.

Check the [online program](#) for the latest changes.

Week 1

Monday, May 29

Students arrive

Tuesday, May 30

08:00-08:30	Welcome Breakfast	CEBAF Center Quark Café
08:30-09:15	Welcome to HUGS 2023	Alberto Accardi (Hampton U./JLab)
09:15-10:45	Residence Facility Welcome	L. Surles-Law (JLab)
09:45-10:30	Fostering a Positive Workplace	Melissa Hicks (ResFac)
10:30-12:00	Badging at the Support Center	SSC atrium and room 52
12:00-01:30	Lunch	
01:30-02:00	Safety at Jefferson Lab	Bob May (JLab)
02:00-02:15	Break	
02:15-03:15	Nuclear Science at Jefferson Lab	D. Higinbotham (JLab)
03:15-03:45	Break and Photo Session	CEBAF Center Lobby
03:45-04:45	Non-perturbative methods in continuum QCD	A. Bashir (U. Michoacana & JLab)
04:45-05:15	Informal Discussion	

Wednesday, May 31

09:00-10:00	Deeply Exclusive Reactions	S. Niccolai (IJClab, Orsay)
10:00-10:15	Break	
10:15-11:15	Deeply Exclusive Reactions	S. Niccolai (IJClab, Orsay)
11:15-11:45	Informal Discussion	
12:00-01:30	Lunch	
01:30-02:30	Non-perturbative methods in continuum QCD	A. Bashir (U. Michoacana & JLab)
02:30-02:45	Break	
02:45-03:45	Non-perturbative methods in continuum QCD	A. Bashir (U. Michoacana & JLab)
03:45-04:15	Informal Discussion	
04:30-06:30	HUGS Social	Residence Facility Great Room

Thursday, June 1

09:00-10:00	Deeply Exclusive Reactions	S. Niccolai (IJClab, Orsay)
10:00-10:15	<i>Break</i>	
10:15-11:15	Deeply Exclusive Reactions	S. Niccolai (IJClab, Orsay)
11:15-11:45	<i>Informal Discussion</i>	
12:00-01:30	<i>Lunch</i>	
01:30-02:30	Non-perturbative methods in continuum QCD	A. Bashir (U. Michoacana & JLab)
02:30-02:45	<i>Break</i>	
02:45-03:45	Non-perturbative methods in continuum QCD	A. Bashir (U. Michoacana & JLab)
03:45-04:15	<i>Informal Discussion</i>	

Friday, June 2

08:30-12:00	JLab Tour – meet in the CEBAF Center lobby	Mike Robbins (JLab)
12:00-01:30	<i>Lunch</i>	
01:30-02:30	Deeply Exclusive Reactions	S. Niccolai (IJClab, Orsay)
02:30-02:45	<i>Break</i>	
02:45-03:30	Non-perturbative methods in continuum QCD	A. Bashir (U. Michoacana & JLab)
03:30-03:45	<i>Break</i>	
03:45-04:15	<i>Informal Discussion</i>	

Saturday, June 3*Excursion TBA***Week 2****Monday, June 5**

09:00-10:00	The CEBAF accelerator from 12 to 22 GeV	R. Bodenstein (JLab)
10:00-10:15	<i>Break</i>	
10:15-11:15	The CEBAF accelerator from 12 to 22 GeV	R. Bodenstein (JLab)
11:15-11:45	<i>Informal Discussion</i>	
12:00-01:30	<i>Lunch</i>	
01:30-02:30	QCD dynamics in electron-nucleus collisions	H. Szumila-Vance (JLab)
02:30-02:45	<i>Break</i>	
02:45-03:45	QCD dynamics in electron-nucleus collisions	H. Szumila-Vance (JLab)
03:45-04:15	<i>Informal Discussion</i>	

Tuesday, June 6

09:00-10:00	Global PDF fits: connecting low- to high-energy physics	Maria Ubiali (Cambridge, UK)
10:15-11:15	Break	
10:15-11:15	Global PDF fits: connecting low- to high-energy physics	Maria Ubiali (Cambridge, UK)
11:15-11:45	Informal Discussion	
12:00-01:30	Lunch	
01:30-02:30	QCD dynamics in electron-nucleus collisions	H. Szumila-Vance (JLab)
02:30-02:45	Break	
02:45-03:45	QCD dynamics in electron-nucleus collisions	H. Szumila-Vance (JLab)
03:45-04:15	Informal Discussion	

Wednesday, June 7

09:00-10:00	Global PDF fits: connecting low- to high-energy physics	Maria Ubiali (Cambridge, UK)
10:00-10:15	Break	
10:15-11:15	Global PDF fits: connecting low- to high-energy physics	Maria Ubiali (Cambridge, UK)
11:15-11:45	Informal Discussion	
12:00-01:30	Lunch	
01:30-02:30	Can quantum computing help us to better understand quantum fields?	Raghav Jha (JLab)
02:30-02:45	Break	
02:45-03:45	Can quantum computing help us to better understand quantum fields?	Raghav Jha (JLab)
03:45-04:15	Informal Discussion	
04:30-06:30	HUGS Social	Residence Facility Great Room

Thursday, June 8

09:00-10:00	Global PDF fits: connecting low- to high-energy physics	Maria Ubiali (Cambridge, UK)
10:00-10:15	Break	
10:15-11:15	QCD dynamics in electron-nucleus collisions	. Szumila-Vance (JLab)
11:15-11:45	Informal Discussion	
12:00-01:30	ROUNDTABLE & PIZZA !!	room F113
01:30-02:30	Exploring QCD at the Electron Ion Collider	C. Weiss (JLab)
02:30-02:45	Break	
02:45-03:45	Exploring QCD at the Electron Ion Collider	C. Weiss (JLab)
03:45-04:15	Informal Discussion	

Friday, June 9

09:00-10:00	Lattice QCD for Hadronic and Nuclear Physics	J. Dudek (William & Mary)
10:00-10:15	<i>Break</i>	
10:15-11:15	Lattice QCD for Hadronic and Nuclear Physics	J. Dudek (William & Mary)
11:15-11:45	<i>Informal Discussion</i>	
12:00-01:30	<i>Lunch</i>	
01:30-02:30	Exploring QCD at the Electron Ion Collider	C. Weiss (JLab)
02:30-02:45	<i>Break</i>	
02:45-03:45	Exploring QCD at the Electron Ion Collider	C. Weiss (JLab)
03:45-04:15	<i>Informal Discussion</i>	

Saturday, June 10*Excursion TBA***Week 3****Monday, June 12**

09:00-10:00	3D partonic structure of pions and nucleons	P. Barry (JLab)
10:00-10:15	<i>Break</i>	
10:15-11:15	3D partonic structure of pions and nucleons	P. Barry (JLab)
11:15-11:45	<i>Informal Discussion</i>	
12:00-01:30	<i>Lunch</i>	
01:30-02:30	Machine Learning for Nuclear Physics and the EIC	C. Fanelli (William & Mary)
02:30-02:45	<i>Break</i>	
02:45-03:45	Machine Learning for Nuclear Physics and the EIC	C. Fanelli (William & Mary)
03:45-04:15	<i>Informal Discussion</i>	

Tuesday, June 13

09:00-10:00	How to prepare a LOI for a new experiment	M. Dalton (JLab)
10:00-10:15	<i>Break</i>	
10:15-11:15	How to prepare a LOI for a new experiment	M. Dalton (JLab)
11:15-11:45	<i>Informal Discussion</i>	
12:00-01:30	<i>Lunch</i>	
01:30-02:30	Machine Learning for Nuclear Physics and the EIC	C. Fanelli (William & Mary)
02:30-02:45	<i>Break</i>	
02:45-03:45	Machine Learning for Nuclear Physics and the EIC	C. Fanelli (William & Mary)
03:45-04:15	<i>Informal Discussion</i>	

Wednesday, June 14

09:00-12:00	Virtual Poster Session	
12:00-01:30	Lunch	
01:30-02:30	Machine Learning for Nuclear Physics and the EIC	C. Fanelli (William & Mary)
02:30-02:45	Break	
02:45-03:45	Machine Learning for Nuclear Physics and the EIC	C. Fanelli (William & Mary)
03:45-04:15	Informal Discussion	

Thursday, June 15

09:00-12:00	Student Seminars	
12:00-01:00	Lunch	
01:00-04:00	Student Seminars	
04:00-06:30	FAREWELL PICNIC	<i>Residence Facility Great Room</i>

Friday, June 16

09:00-12:00	Student Seminars	
12:00-02:30	Lunch	
02:30-04:00	HUGS Poster and Seminar Prize Ceremony... and Farewell!	

Saturday, June 18

Students depart