

Welcome to the Institute for Nuclear Theory

- The INT is a national resource founded in 1990 and funded by the US Department of Energy and the University of Washington.
- It provides an environment for scientists to advance the frontiers of subatomic physics and make connections to developments in other areas of physics, astrophysics and cosmology.
- Scientific meetings at the INT attracts about 400 visitors annually to enable breakthrough discoveries through collaborations.

2025

COLLABORATION MEETING

MARCH 3 - MARCH 14, 2025

Meeting on Nucleosynthesis Uncertainties (COLLAB)

Chris Fryer, Falk Herwig, Erika Holmbeck, Alison Laird, Frank Timmes
Sponsored by JINA/CeNAM and CNLS

WORKSHOP

MARCH 17 - MARCH 21, 2025

Chiral EFT: New Perspectives (25-92W)

Ubirajara van Kolck, Vincenzo Cirigliano, Thomas Papenbrock, Maria Piarulli

[MORE →](#)

COLLABORATION MEETING

MARCH 24 - MARCH 25, 2025

NP3M Collaboration Meeting (COLLAB)

Andrew W. Steiner
Sponsored by NP3M and NSF

PROGRAM

MARCH 31 - APRIL 11, 2025

Co-design for Fundamental Physics in the Fault-Tolerant Era (IQuS)

Sponsored by IQuS

[MORE →](#)

PROGRAM

MAY 12 - JUNE 20, 2025

CFNS-INT Joint Program: Precision QCD with the Electron Ion Collider (25-1)

Renee Fatemi, Huey-Wen Lin, Werner Vogelsang
Joint with the Bridging Theory Workshop

[MORE →](#)

WORKSHOP

JUNE 2 - JUNE 6, 2025

BNL-INT Joint Workshop: Bridging Theory and Experiment at the Electron-Ion Collider (25-93W)

Alessandro Bacchetta, Wim Cosyn, Felix Ringer, Anna Stasto
Joint with the Precision QCD Program

[MORE →](#)

PROGRAM

JUNE 23 - JULY 25, 2025

Compressible Turbulence: From Cold Atoms to Neutron Star Mergers (25-2a)

Aurel Bulgac, Gregory Eyink, Michael Forbes, Nir Navon
Embedded workshop dates: June 23-27

[MORE →](#)

PROGRAM

AUGUST 18 - AUGUST 29, 2025

Many-body Quantum Magic (MBQM-2025)

Sponsored by IQuS

[MORE →](#)

PROGRAM

SEPTEMBER 2 - OCTOBER 3, 2025

From Colliders to the Cosmos: Exploring the Extremes of Matter (25-2b)

N. Andersson, C. Ratti, B. Sathyaprakash
Joint with the Nuclear Physics in Mergers Workshop

PROGRAM

DECEMBER 1 - DECEMBER 12, 2025

Open Quantum Systems: Dissipative Dynamics from Quarks to the Cosmos (25-3b)

Y. Akamatsu, G. Barenboim, D. Boyanovsky, N. Brambilla, X. Yao

WORKSHOP

SEPTEMBER 8 - SEPTEMBER 12, 2025

Nuclear Physics in Mergers - Going Beyond the Equation of State (25-94W)

A. Haber, E. Most, C. Raithel
Joint with the Colliders Program

PROGRAM

OCTOBER 27 - NOVEMBER 7, 2025

The QCD Critical Point: Are We There Yet? (25-3a)

H. Caines, V. Skokov, A. Sorensen

Reminders and Announcements

Safety: Please read the welcome material and be aware of building evacuation procedures.

Conduct: Please read and follow the INT code of conduct. If you experience or witness behavior that violates the INT code of conduct, please report it promptly.

Exit Report: Provide us feedback (positive and negative).

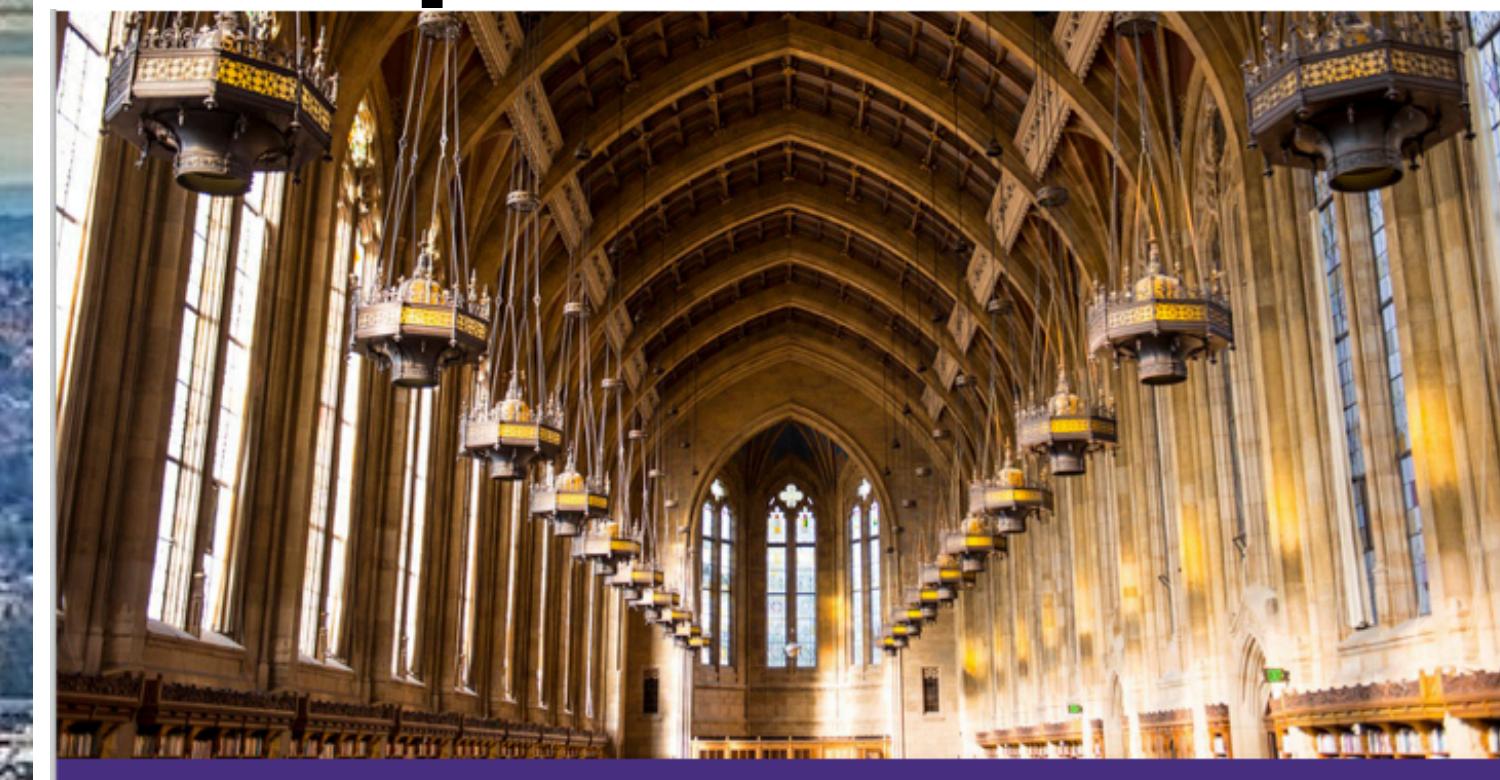
Pre-print #'s: Request an INT preprint number and acknowledge the INT in publications that result from interactions during your visit.

Proposing INT programs: Consider proposing programs and workshops in 2026 and 2027. The deadline is scheduled for July 2026.

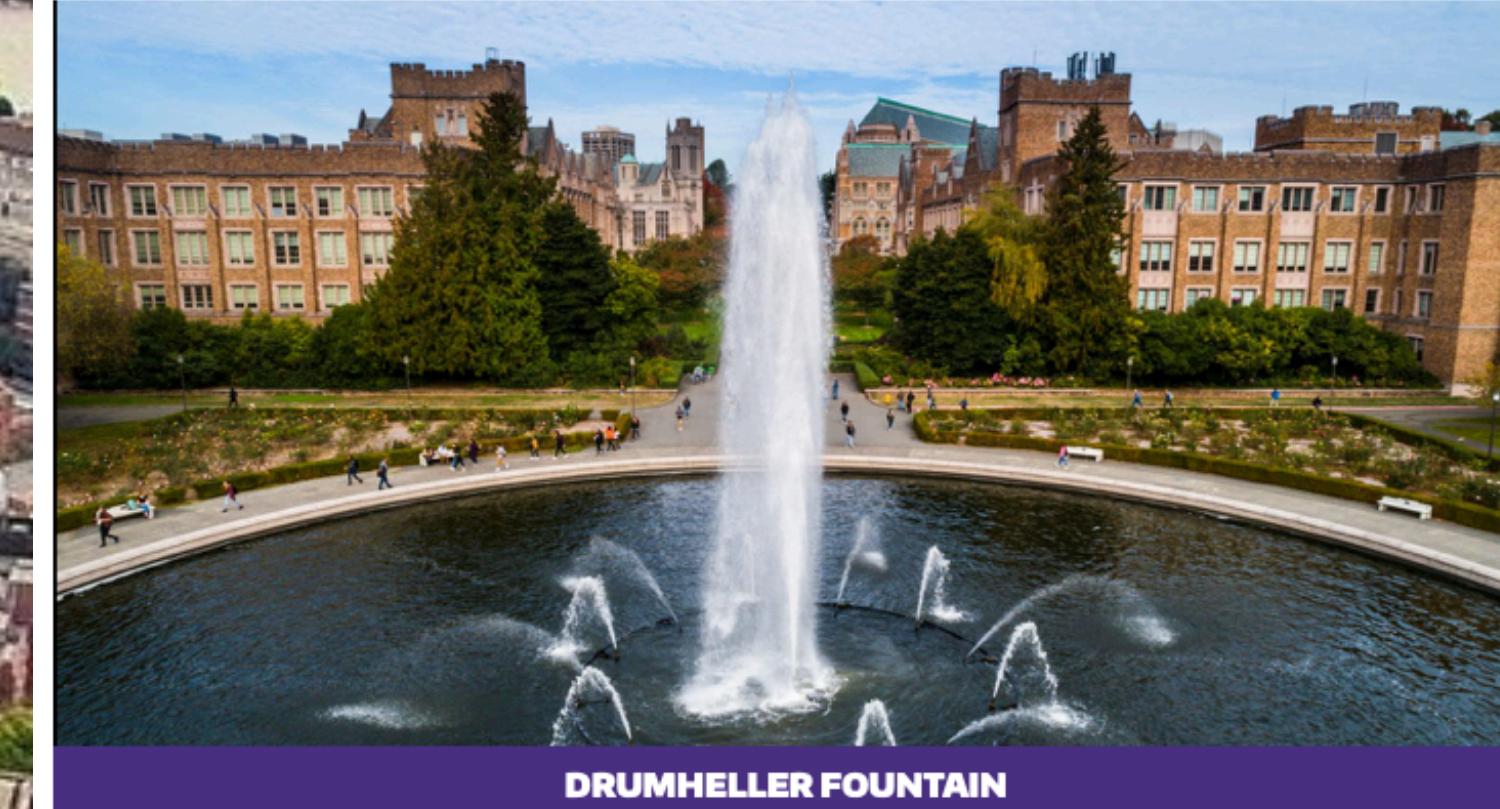
Collaboration meetings: We can host collaboration meetings. We provide offices, meeting space, and assistance with arranging lodging, among other services, but we cannot offer financial support.

Friends of the INT: Please consider donating to the 'Friends of the INT' fund. This discretionary fund helps support activities that make the INT a fun place to work and visit.

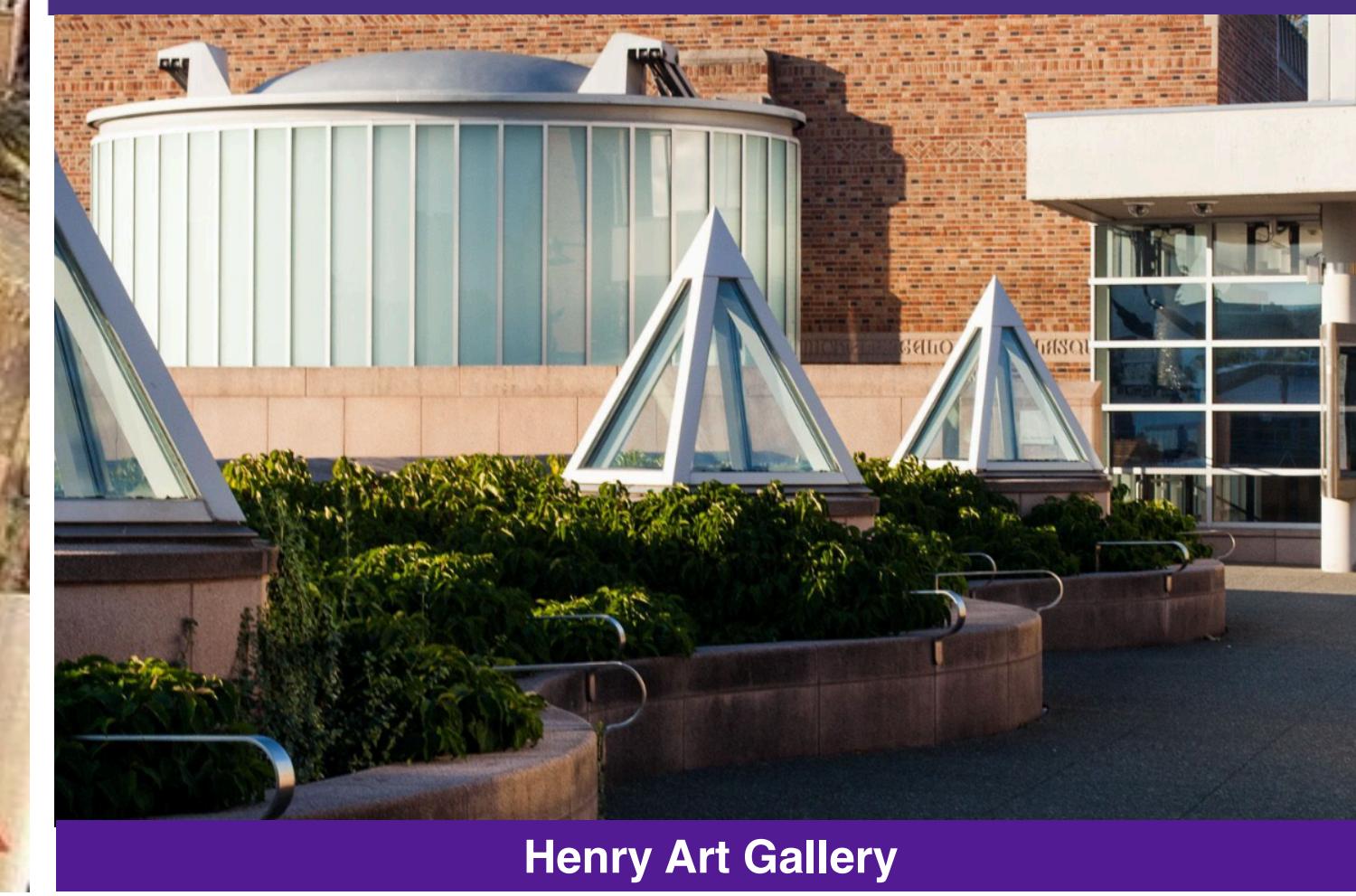
Take a stroll: The UW Campus is beautiful!



SUZZALLO LIBRARY



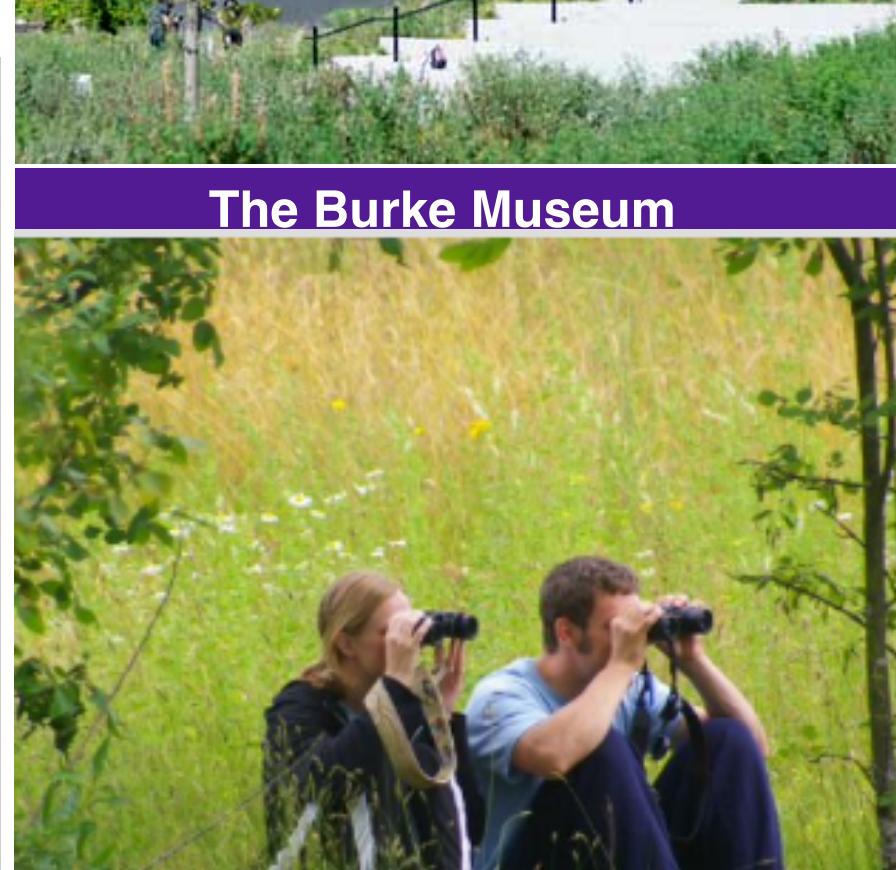
DRUMHELLER FOUNTAIN



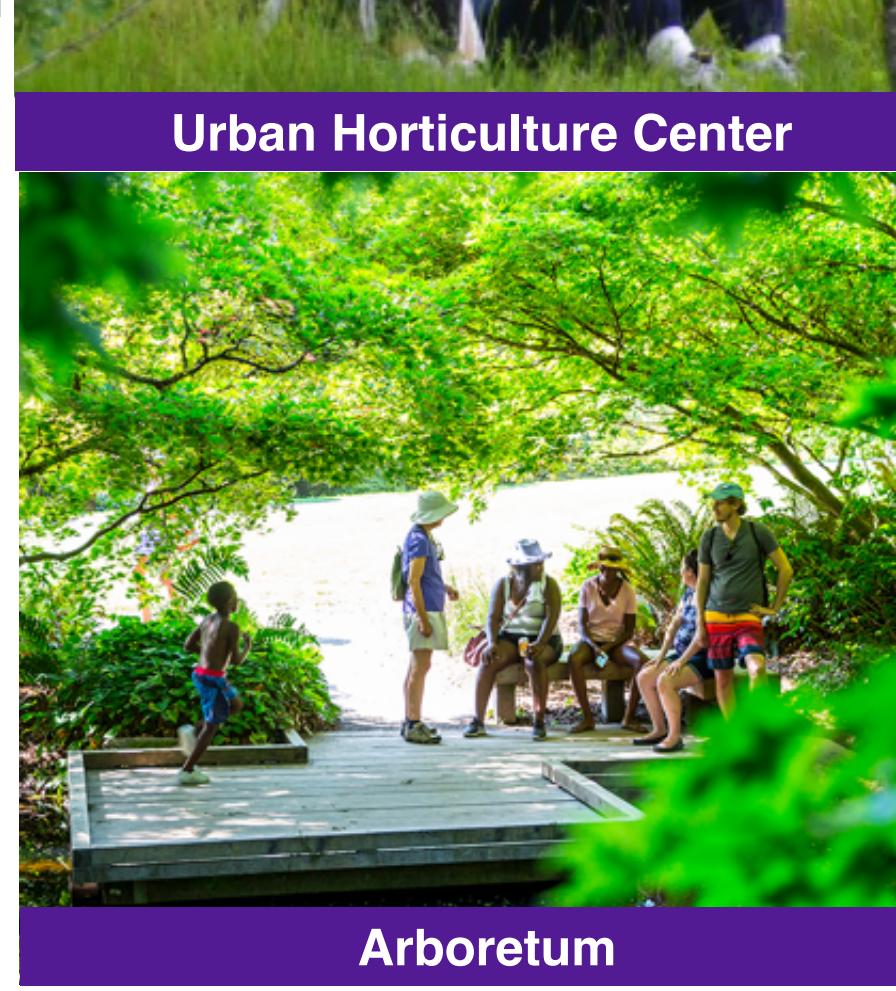
Henry Art Gallery



The Burke Museum

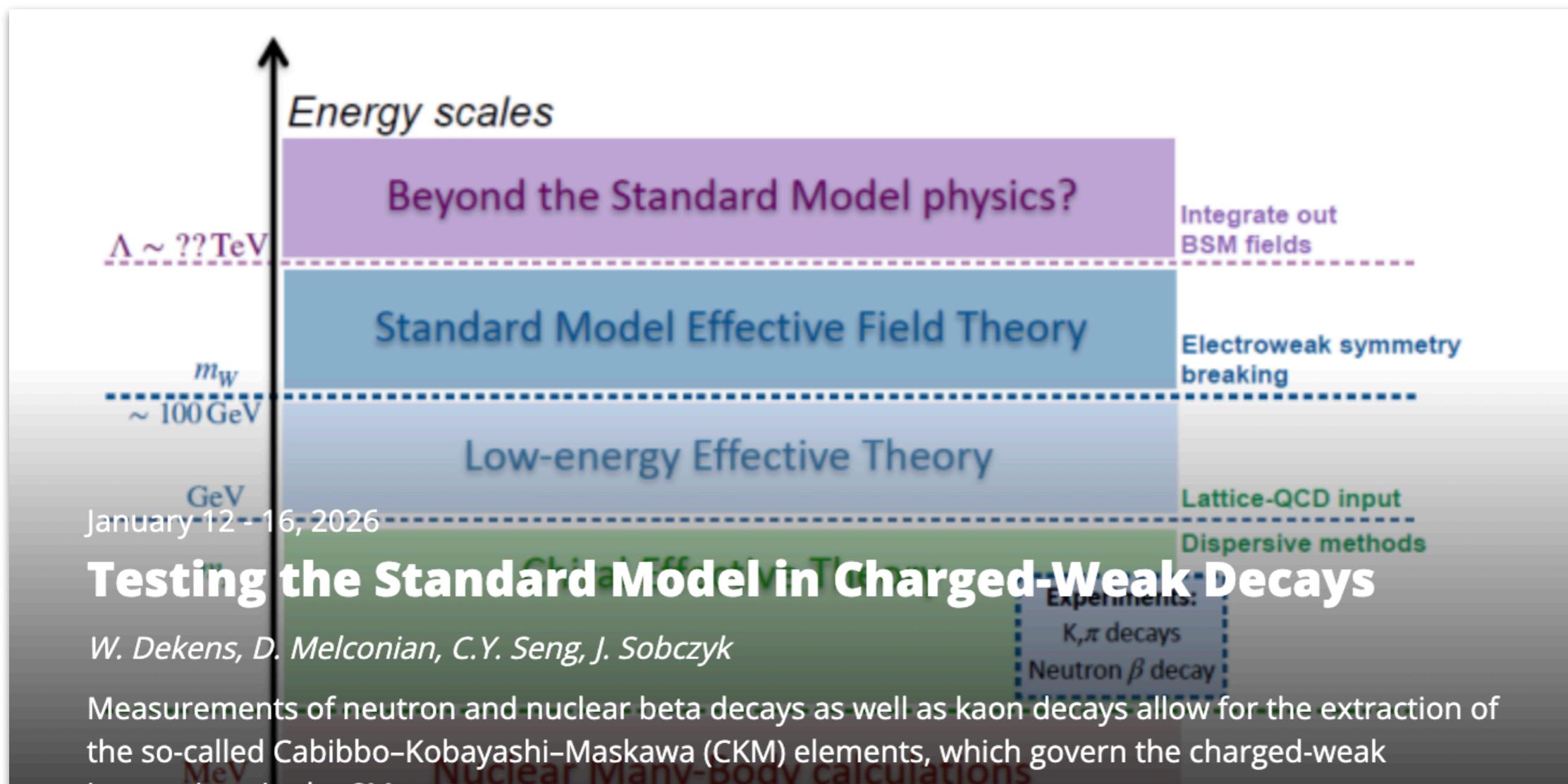


Urban Horticulture Center



Arboretum

Testing the Standard Model in Charged-Weak Decays



READ MORE... →

Topics:

- V_{us} and single-hadron decays;
- V_{us} and nuclear decays; Strangeness-changing processes and V_{us} ;
- Global analysis, implications for BSM physics;
- Future prospects, writing session

Schedule

Mon: BSM & neutron decay

Monday, January 12, 2026

Start Time	Presentation Title	Presenter
8:00 AM	Check-In	
8:45 AM	Welcome to the INT & Introductions	Wouter Dekens
9:00 AM	Beta decays as a probe of new physics	Vincenzo Cirigliano
9:45 AM	TBA	Maria Dawid
10:30 AM	Coffee Break	
11:00 AM	TBA	Benedetta Belfatto
11:45 AM	Latest constraints on light sterile neutrino from the KATRIN Experiment	Shailaja Mohanty
12:30 PM	Lunch	
2:00 PM	TBA	Chen-Yu Liu
2:45 PM	Neutron beta-decay experiments at Los Alamos	Steven Clayton
3:30 PM	Coffee Break	
4:00 PM	Discussion	

Tue: neutron decay

Tuesday, January 13, 2026

Start Time	Presentation Title	Presenter
9:00 AM	The gamma-W box correction to Vud with dispersion relations: certainties and uncertainties	Misha Gorshteyn
9:45 AM	Overview of Neutron Decay Angular Correlation Measurements (with some comments about beta energy-dependent observables)	Albert Young
10:30 AM	Coffee Break	
11:00 AM	TBA	Zack Hall
11:45 AM	TBA	Dinko Pocanic
12:00 PM	Lunch	
2:00 PM	TBA	Thomas Richardson
2:45 PM	TBA	Wolfgang Schreyer
3:30 PM	Coffee Break	
4:00 PM	Discussion	

Wed: Superallowed

Wednesday,

Start Time	Presenter
9:00 AM	Emanuele Mereghetti
9:45 AM	Garrett King
10:30 AM	
11:00 AM	Nadezda Smirnova
11:45 AM	Xu Feng
12:30 PM	
2:00 PM	Regan Zite
2:45 PM	
3:30 PM	
4:00 PM	

Thursday, January 15, 2026

Start Time	Presentation Title	Presenter
9:00 AM	TBA	TBA
9:45 AM	Penning trap beta-decay Q value measurements for BSM Physics searches	Matthew Redshaw
10:30 AM	Coffee Break	
11:00 AM	Impact for Rare Kaon decays of Testing the Standard Model in Charged-Weak Decays	Giancarlo D'Ambrosio
11:45 AM	Testing CKM Unitarity with the NA62 Experiment	Victor Shang
12:30 PM	Lunch	
2:00 PM	TBA	Emilie Passemard
2:45 PM	TBA	Xin-Yu Tuo
3:30 PM	Coffee Break	
4:00 PM	Discussion	

Thu: Vus & kaon decays

Friday, January 16, 2026

Start Time	Presentation Title	Presenter
10:00 AM	New Ideas & Short Talks	
11:15 AM	Coffee Break	
11:45 AM	The recent measurement of the neutrino electron correlation coefficient a in free neutron beta decay with the aSPECT spectrometer	Stefan Baessler
12:30 PM	PIONEER: A Next Generation Rare Pion Decay Experiment	Quentin Buat
1:15 PM	Lunch	
2:30 PM	Discussion & white paper writing	

Fri: ongoing/future work & writing session

Some Logistics

Talks:

- All talks/discussions/coffee breaks in, or next to, this room
- Please send your title/slides to Megan (mjb47@uw.edu) well before the start of your session

Lunch/dinner:

- Mostly on your own for lunch/dinner
 - Lots of options around “the ave.”
- Workshop dinner (self-funded) on Wednesday evening (time/location TBA)
 - Please sign up **before lunch today**

Discussions:

- Will discuss the talks of each day: please add any topics/questions to [**this google-doc**](#)
- Two “special” discussion topics:
 - Tuesday: Theory consensus for neutron decay
 - Friday: V_{ud} & V_{us} (VUDU) alliance