SUCA PARTIES NAME OF THE PARTIES OF

SEARCHING FOR THE SOURCES OF GALACTIC COSMIC RAYS

OCTOBER 14-17













Speakers

Despite ongoing research, the question of where cosmic rays originate within the Milky Way remains unanswered. The symposium will host a number of invited speakers who are experts in various aspects of galactic multi-messenger astrophysics.

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Two dedicated discussion panels will provide opportunities for open discussion. One panel will delve into the current status and challenges of multi-messenger observations and theoretical modeling. The other will address the future of observations and instrumentation required to make a breakthrough in our understanding of the galactic origin of cosmic rays.

Current State of Multimessenger Astrophysics

- **P. Huentemeyer** (Michigan Technological University, USA)
- **A. Neronov** (Ecole Polytechnique Federale de Lausanne, Switzerland)
- J. Vandenbroucke (UW-Madison, USA)

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	Introduction	Paolo Desia
	Northwoods Room, Union South, University of Wisconsin–Madison	08:45 - 09:0
09:00	Galactic Cosmic Rays: loose ends or shaking pillars? (remote)	Pasquale Bla
	Northwoods Room, Union South, University of Wisconsin–Madison	09:00 - 09:4
	AMS-02 results and perspectives for future measurements with a magnetic spectrometer	Paolo Zucco
10:00		
	Northwoods Room, Union South, University of Wisconsin–Madison	09:45 - 10:3
	Coffee Break	
	Northwoods Room, Union South, University of Wisconsin–Madison	10:30 - 11:0
11:00	Science Results of 9 Years of Measurements from CALET Operation on the International Space Station	John Krizmani
	Northwoods Room, Union South, University of Wisconsin–Madison	11:00 - 11:4
10.00	Lunch (On Your Own)	
12:00		
13:00		11:45 - 13:1
	Results from the DAMPE space mission (remote)	Ivan De Mit
	Northwoods Boom Union South University of Wissensin Medican	13:15 - 14:0
14:00	Northwoods Room, Union South, University of Wisconsin–Madison Spectral Signatures of Local Cosmic Ray Sources	
1-1.00	Spectral signatures of Local Cosmic Ray Sources	lgor Moskalenk
	Northwoods Room, Union South, University of Wisconsin–Madison	14:00 - 14:4
	Coffee Break	
15:00	Northwoods Room, Union South, University of Wisconsin–Madison	14:45 - 15:1
	Investigating the CREDIT history of supernova remnants as cosmic-ray sources	Philipp Mertsc
	Northwoods Room, Union South, University of Wisconsin–Madison	15:15 - 16:0
16:00	Multi-messenger modeling of Galactic cosmic-ray acceleration and transport	Lukas Merte
	Northwoods Room, Union South, University of Wisconsin–Madison	16:00 - 16:4
18:00	Special Events: Welcome Reception	



18:00 - 20:00

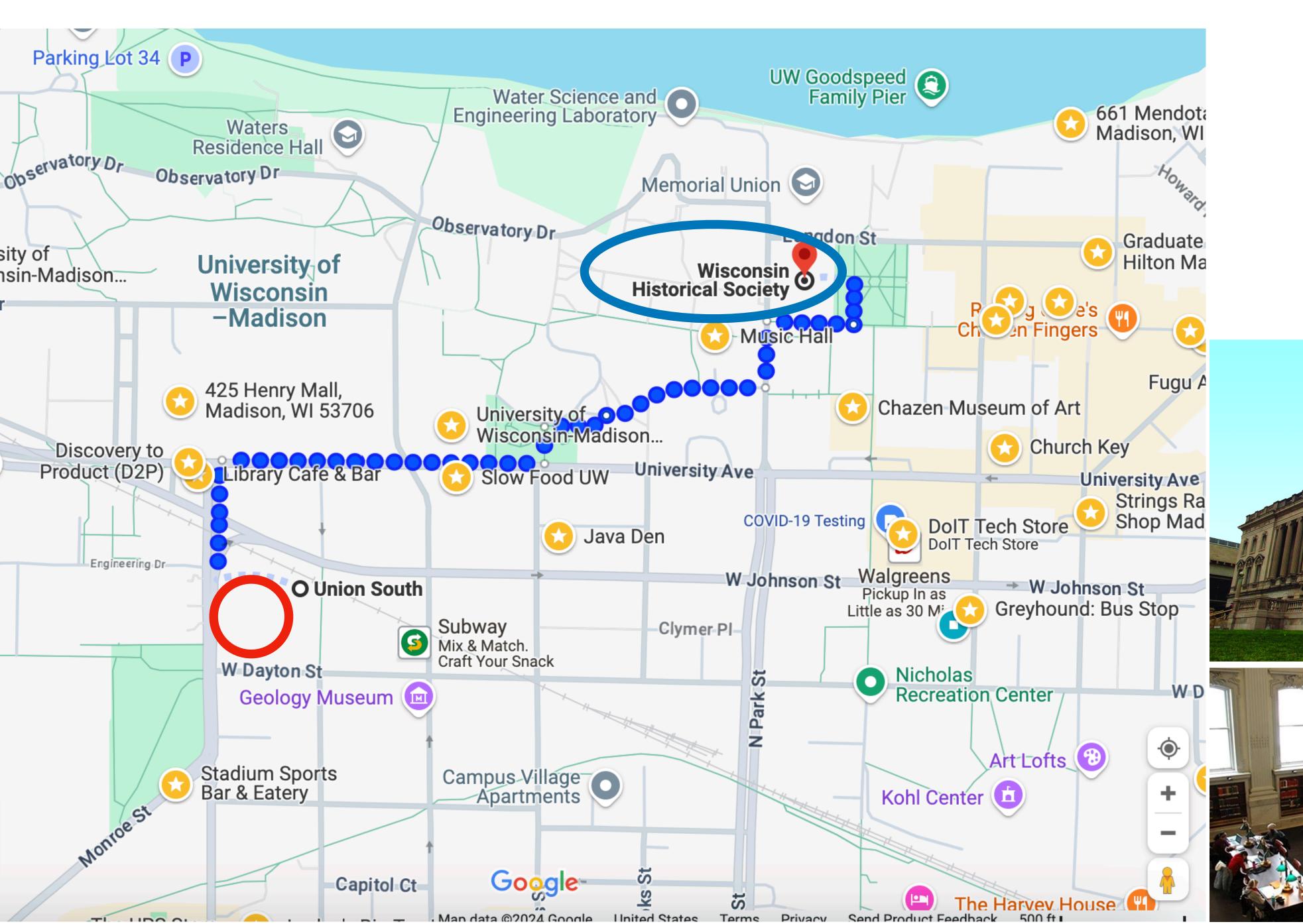








Library Reading Room, Wisconsin Historical Society







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Tue 15/10

09:00	Recent Results on Cosmic Ray Spectrum and Anisotropy from the GRAPES-3 Experiment (remote) Pravata Kumar Mohanty		
	Northwoods Room, Union South, University of Wisconsin–Madison	09:00 - 09:4	
	In-person presentation	Zhen Ca	
10:00			
	Northwoods Room, Union South, University of Wisconsin–Madison	09:45 - 10:3	
	Coffee Break		
	Northwoods Room, Union South, University of Wisconsin–Madison	10:30 - 11:0	
11:00	The Fermi view of the Galactic diffuse gamma-ray emission	Michela Neg	
	Northwoods Room, Union South, University of Wisconsin–Madison	11:00 - 11:4	
	Lunch (On Your Own)		
12:00			
13:00		11:45 - 13:1	
	HAWC Observations of the Spectrum, Composition and Anisotropy of Cosmic Rays Below the Knee Juan Carlos Díaz Vélez	•	
	Northwoods Room, Union South, University of Wisconsin–Madison	13:15 - 14:0	
14:00	Galactic Gamma Ray Sources as seen by HAWC	Jordan Goodma	
	Northwoods Room, Union South, University of Wisconsin–Madison	14:00 - 14:4	
	Coffee Break		
15:00	Northwoods Room, Union South, University of Wisconsin–Madison	14:45 - 15::	
	Young stellar cluster as cosmic ray sources	Giovanni Morlii	
	Northwoods Room, Union South, University of Wisconsin–Madison	15:15 - 16:0	
16:00	In-person presentation	Nahee Pa	
	Northwoods Room, Union South, University of Wisconsin–Madison	16:00 - 16:4	
	Panels: Current State of Multimessenger Astrophysics Andrii Neronov, Prof. Justin Vandenbrou	ıcke, Petra Huenteme	
17:00			
	Northwoods Room, Union South, University of Wisconsin–Madison	16:45 - 17:4	
18:00			

Special Events: Ghost Tour (Advance Registration and Payment Required) 20:00 19:00 - 20:30 Outside the Wisconsin Historical Society



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Wed 16/10

09:00	Galactic gamma-ray PeVatron observations and non-thermal processes in galactic	ic sources (remote) Rubén López-Coto
	Northwoods Room, Union South, University of Wisconsin–Madison	09:00 - 09:45
	IceCube: Status of the Search for Cosmic Ray Sources	Mr Francis Halzen
10:00		
	Northwoods Room, Union South, University of Wisconsin–Madison	09:45 - 10:30
	Coffee Break	
	Northwoods Room, Union South, University of Wisconsin–Madison	10:30 - 11:00
11:00	Panels: Future of Multimessenger Astrophysics	Eli Waxman, Kohta Murase, Szabolcs Marka
	Northwoods Room, Union South, University of Wisconsin–Madison	11:00 - 12:00
12:00	Lunch (On Your Own)	
13:00		12:00 - 13:15
	In-person presentation	Sarah Gossan
	Northwoods Room, Union South, University of Wisconsin–Madison	13:15 - 14:00
14:00	The Unexpected TeV Emitters in the Galactic Plane	Ke Fang
	Northwoods Room, Union South, University of Wisconsin–Madison	14:00 - 14:45
	Coffee Break	
15:00		14:45 - 15:15
	Interaction of Cosmic Rays at Mesoscopic Scales	ELLEN GOULD ZWEIBEL
	Northwoods Room, Union South, University of Wisconsin–Madison	15:15 - 16:00
16:00	Are Supernova Remnants as Cosmic Ray Factories? Yes, but	Damiano Caprioli
	Northwoods Room, Union South, University of Wisconsin–Madison	16:00 - 16:45
17:00	Galactic CR sources: Insights from the diffuse emission, TeV halos, and the CR a	nisotropy Prof. Gwenael Giacinti
	Northwoods Room, Union South, University of Wisconsin–Madison	16:45 - 17:30

SUMADISON 2024

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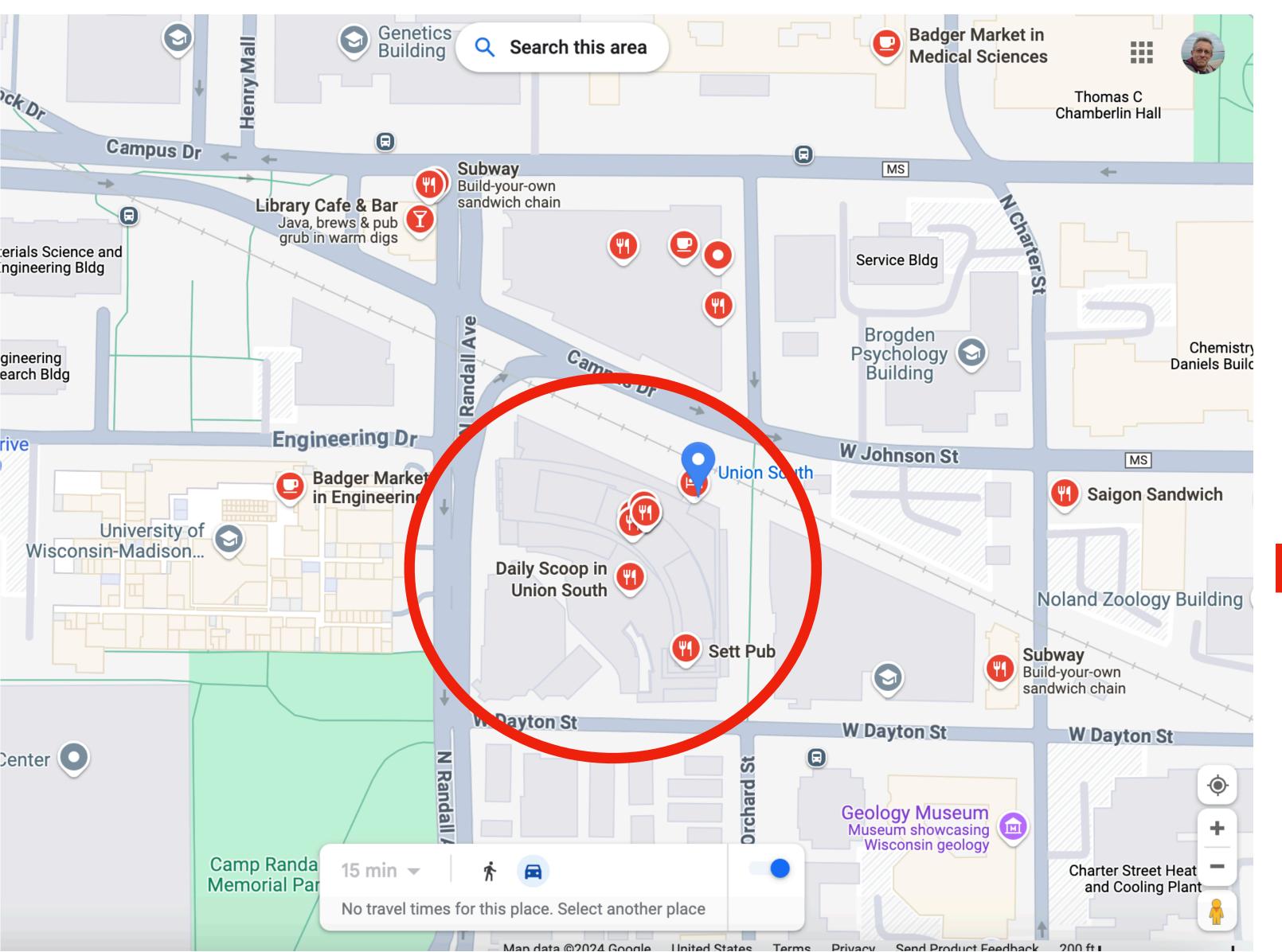


Thu 17/10

09:00	A Multi-Messenger View of the Milky Way	Dan Hooper
	Northwoods Room, Union South, University of Wisconsin–Madison	09:00 - 09:45
	IceCube's Galactic Neutrinos: Diffuse Emission or Hidden Sources?	Markus Ahlers
10:00		
	Northwoods Room, Union South, University of Wisconsin–Madison	09:45 - 10:30
	Coffee Break	
	Northwoods Room, Union South, University of Wisconsin–Madison	10:30 - 11:00
11:00	Searching for Galactic PeVatrons with the Tibet ASgamma Experiment	Dr Kazumasa Kawata
	Northwoods Room, Union South, University of Wisconsin–Madison	11:00 - 11:45
	Lunch (On Your Own)	
12:00		
13:00	Northwoods Room, Union South, University of Wisconsin–Madison	11:45 - 13:15
	In-person presentation	Tim Linden
	Northwoods Room, Union South, University of Wisconsin–Madison	13:15 - 14:00
14:00	Symposium's Summary	Simona Toscano
	Northwoods Room, Union South, University of Wisconsin–Madison	14:00 - 14:30

We'll write up a summary of the topics discussed at the symposium, including the current status and future.

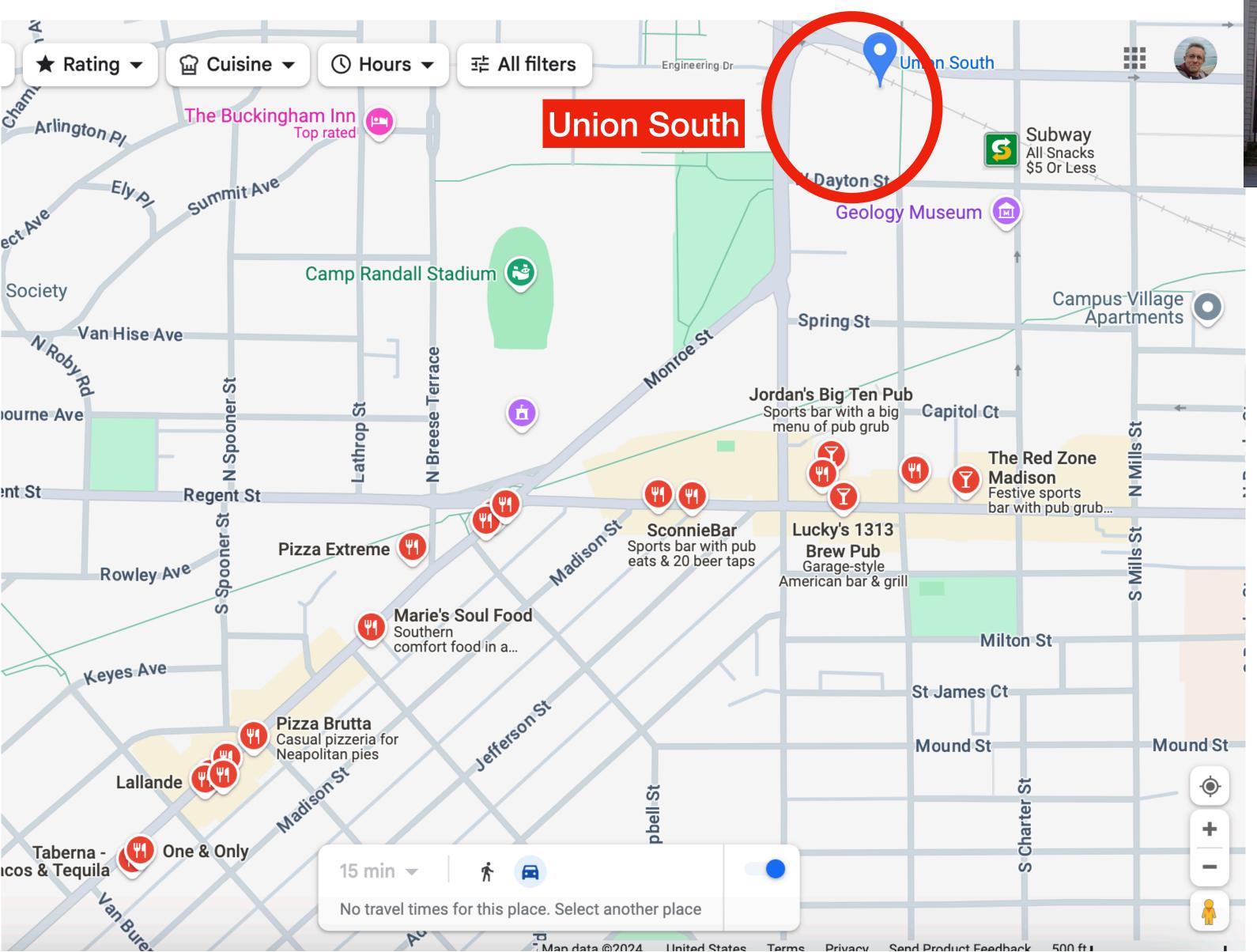
Restaurants around Union South





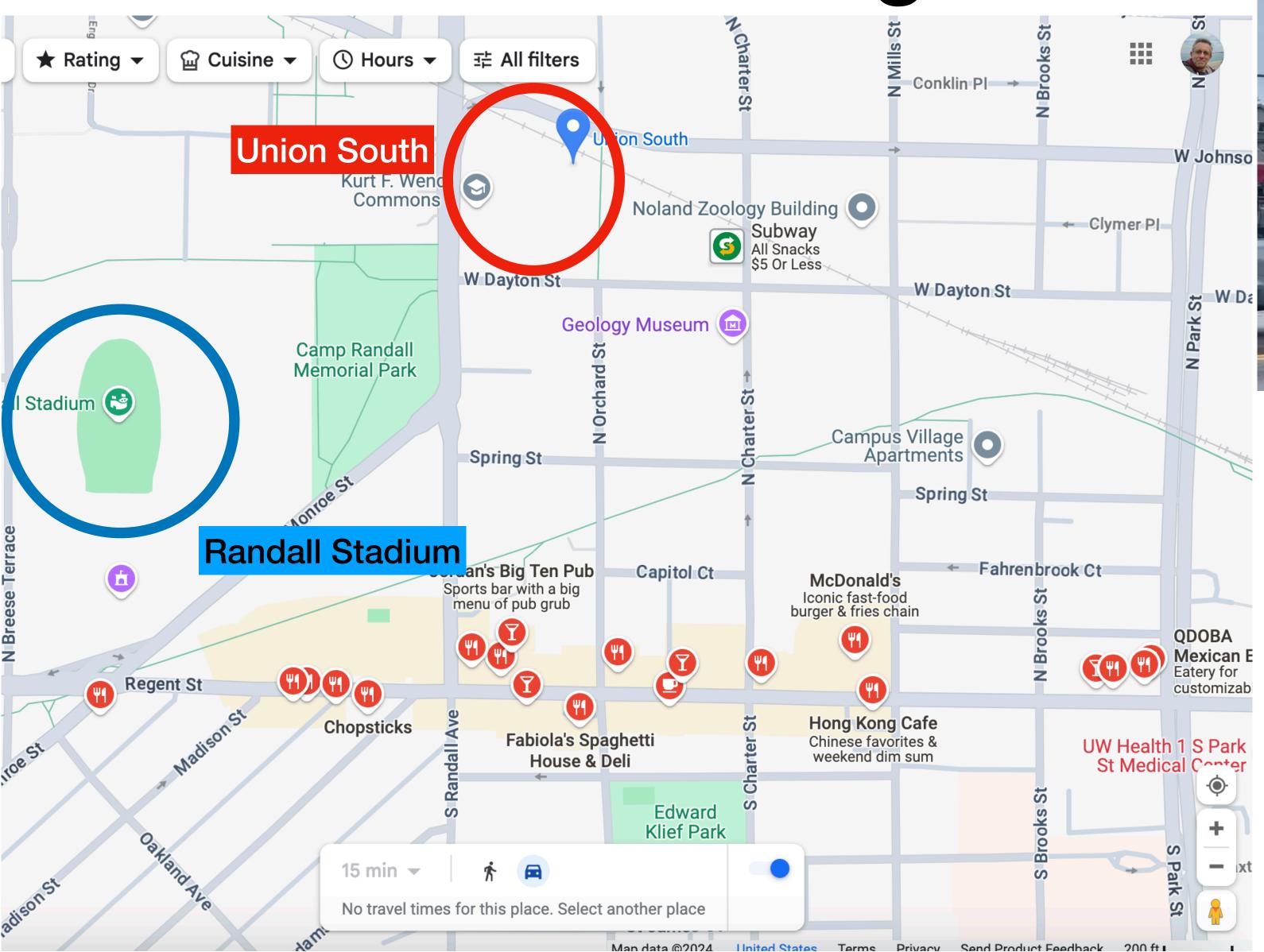
Union South

Restaurants on Monroe St



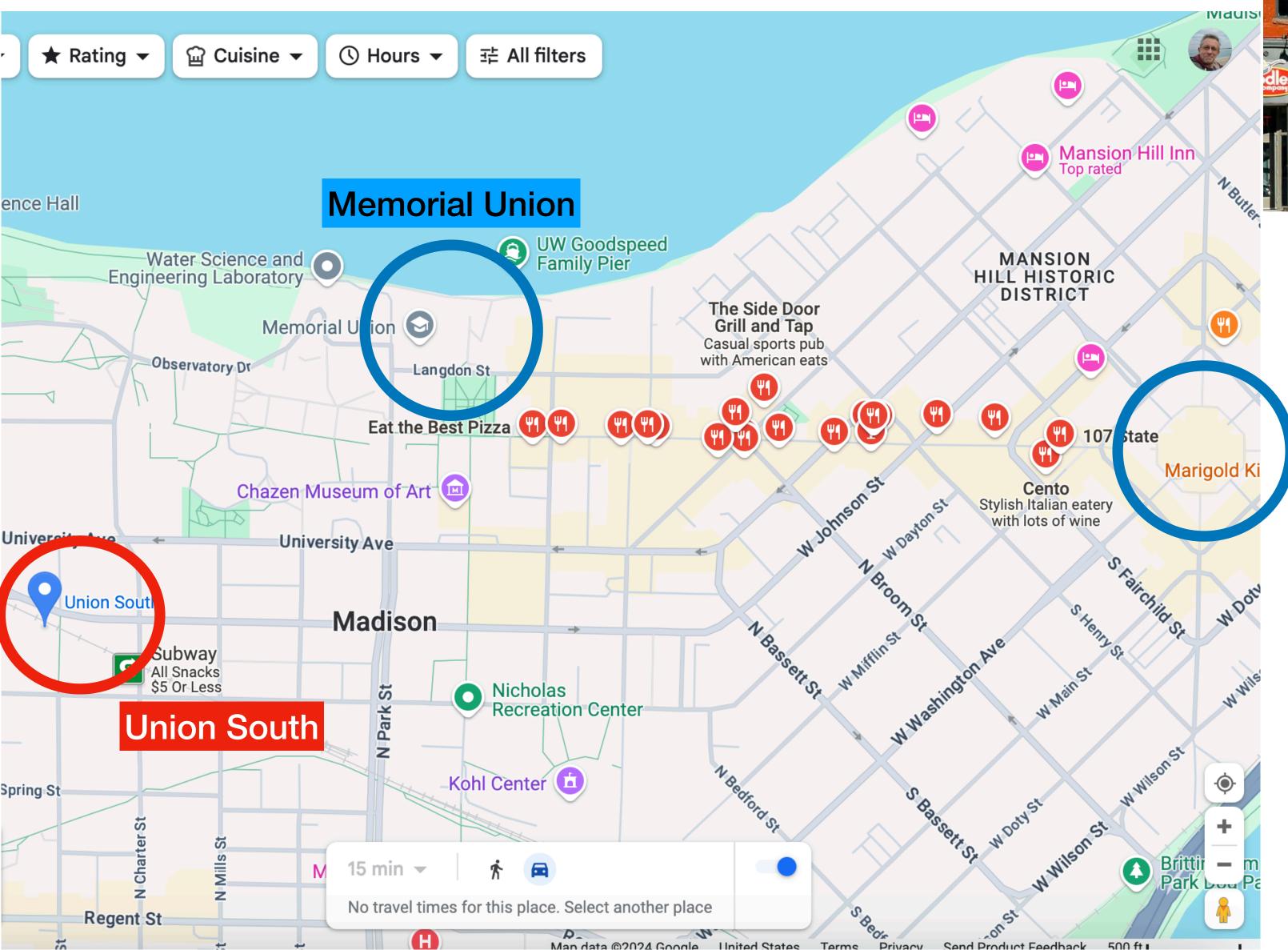


Restaurants on Regent St





Restaurants on State St





Capitol Square

OCTOBER 14-17











14-17 October 2024 Union South, University of Wisconsin–Madison

US/Central timezone

Overview

Speakers and Panelists

Call for Abstracts

Timetable

Payment

Contribution List

Registration

Participant List

Hotels

Visiting Madison

Special Events

Previous Symposium Editions

Contact

sugar2024@icecube.wis

Visiting Madison



General Tourism Information

Tourism information is available from the following sources:

- Visit Downtown Madison
- Destination Madison
- Travel Wisconsin

Transportation to Madison

Madison is served by the Dane County Regional Airport (airport code MSN). It is also accessible via the Van Galder Bus Company from Chicago O'Hare International Airport (ORD) and Badger Coaches from Milwaukee Mitchell International Airport (MKE).

Getting Around Madison

Madison Metro Transit Bus System offers local bus service around the city, particularly in the downtown and campus areas. Bus fare is \$2 per ride, except for routes 80, 81, 82, and 84, which are free. These routes serve the university and areas immediately around campus.

Bus timetables are available on the Metro Transit website, Google Maps, and the Transit app.

Madison is very bicycle-friendly and offers B-Cycle bike rental stations throughout the city.

Uber and Lyft are available in Madison. Taxi service is limited, but available from Union Cab Cooperative and Madison Taxi. Taxis in Madison do not pick up street fares, and wait times can be long. Advance booking is encouraged.



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welcome to SuGAR 2024

welcome to Madison