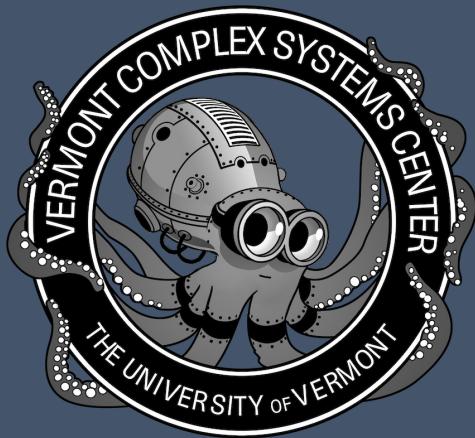




CCSS 2023

Contagion on Complex Social Systems workshop

August 14-16, 2023
Burlington, Vermont



The open-source \LaTeX template, `AMCOS_booklet`, used to generate this booklet is available at https://github.com/maximelucas/AMCOS_booklet

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About

Contagion on Complex Social Systems (CCSS) 2023 is an interdisciplinary workshop gathering world leaders and young researchers in topics related to modeling of contagion in social systems in order to promote and cross-fertilize various computational and modeling approaches.

Organizing committee

- Nicholas Landry, University of Vermont
- Jean-Gabriel Young, University of Vermont
- Juan G. Restrepo, University of Colorado Boulder
- jimi adams, University of Colorado Denver
- Laurent Hébert-Dufresne, University of Vermont
- Alice Schwarze, Dartmouth College

Timetable

CT: Contributed Talk, IT: Invited Talk.

Monday, August 14th

8:00–9:00	Registration and Coffee		
9:00–9:10	Welcome remarks		
	Morning Session Chair: Nicholas Landry		
9:10–10:10	IT	Caroline Buckee Harvard	TBA
10:10–10:30	Coffee break		
10:30-10:45	CT	Mariah Boudreau Vermont	Sensitivity analysis of stochastic polynomials, and its application to epidemic forecasting and random graphs
10:45:-11:00	CT	Yassin Bahid CU Boulder	The statistical and dynamic modeling of protests in Ukraine: the revolution of dignity and preceding times
11:00-11:15	CT	Anjalika Nande Johns Hopkins	Factors affecting variant invasion and spread in an ongoing epidemic
11:15–11:30	Break		
11:30-11:45	CT	Changqing Cheng Binghamton	Multilayer networks with higher-order interaction reveal the impact of collective behavior on epidemic dynamics
11:45-12:00	CT	jimi adams CU Denver	Peer Network Processes in Adolescents' Health Lifestyles
12:00–14:00	Lunch (on your own)		
	Afternoon Session Chair: Mariah Boudreau		
14:00–15:00	IT	Michael Johansson CDC	Advances and Challenges for Infectious Disease Forecasting
15:00–15:30	Coffee Break		
15:30-15:45	CT	Senay Yitbarek UNC Chapel Hill	The Truth is the Whole: Social-ecological determinants of mosquito burden in urban environments
15:45-16:00	CT	Guillaume St-Onge Northeastern	Probability generating functions for epidemics on metapopulation networks
16:00-16:15	CT	Sagar Kumar Northeastern	Moving Beyond Diffusion to Communication in Models of Information Spread
16:15–17:00	Discussion		
17:00	Dinner (on your own)		

Tuesday, August 15th

Morning Session Chair: Anjalika Nande			
9:00–10:00	IT	Sandra González-Bailón Penn	The role of algorithmic curation in the transmission of information
10:00–10:30	Coffee Break		
10:30-10:45	CT	Jonathan St-Onge UVM	Emerging call for action: The complex and paradoxical co-evolution of contagions and institutions
10:45:-11:00	CT	Maximilian Nguyen Princeton	Fundamental Bound on Epidemic Overshoot in the SIR Model
11:00-11:15	CT	Aparna Ananthasubramaniam Michigan	Networks and Identity Drive Geographic Properties of the Diffusion of Lexical Innovation
11:15–11:30	Break		
11:30-11:45	CT	Maisha Sejunti SUNY Buffalo	Floquet Theory for Spreading Dynamics over Periodically Switching Networks
11:45-12:00	CT	Zhen Guo Northeastern	Fandom Brokerage: Contagion from Twitter to Chinese Social Media
12:00–14:00	Lunch (on your own)		
Afternoon Session Chair: jimi adams			
14:00–15:00	IT	C. Brandon Ogbunu Yale	The force of infection-inequality: From models of indirect infection, to the social determinants of health
15:00–15:30	Coffee Break		
15:30-15:45	CT	Subekshya Bidari Columbia	Measles transmission in household structured models
15:45-16:00	CT	Katherine Betz SUNY Buffalo	Multi-Population Evolutionary Game Dynamics on Networks
16:00-16:15	CT	Chadi Saad-Roy UC Berkeley	Modelling SARS-CoV-2 immuno-epidemiological dynamics
16:15–17:00	Discussion		
17:00	Dinner (on your own)		

Wednesday, August 16th

Morning Session Chair: Aparna Ananthasubramaniam			
9:00–10:00	IT	Tim Waring Maine	How social learning and cultural evolution can be of use in complexity science
10:00–10:30	Coffee Break		
10:30-10:45	CT	Will Thompson Vermont	Modeling polarization with voter models on higher order networks
10:45:-11:00	CT	Juanjuan Zhang Fudan University	Heterogeneous changes in mobility in response to the SARS-CoV-2 Omicron BA.2 outbreak in Shanghai
11:00-11:15	CT	Hossein Sabzian Papi Maine	On Algorithmic interpretation of Culture
11:15–16:00	Discussion		
12:00–14:00	Lunch		
Afternoon Session Chair: Jean-Gabriel Young			
14:00–15:00	IT	Sarah Nowak Vermont	Breast cancer screening following guideline change: a complex social systems perspective
15:00–15:30	Coffee Break		
15:30-15:45	CT	Ayush Chopra MIT	Learning to Simulate Millions of Agents by bridging AI and Agent-based Models
15:45-16:00	CT	Andrés Colubri UMass Chan Medical School	Operation Outbreak: a model system for experimental validation of outbreak reconstruction and prediction
16:00–16:15	Closing Remarks		

List of Participants

jimi adams	CU Denver
Aparna Ananthasubramaniam	Michigan
Yassin Bahid	CU Boulder
John Barlow	UVM
Brian Beckage	UVM
Katherine Betz	SUNY Buffalo
Subekshya Bidari	Columbia
Mariah Boudreau	UVM
Caroline Buckee	Harvard
Mimi Byun	University of North Texas
Aviral Chawla	UVM
Changqing Cheng	Binghamton
Phil Chodrow	Middlebury
Ayush Chopra	MIT
Andrés Colubri	UMass Chan Medical School
Mohsen Ghasemizade	UVM
Sandra González-Bailón	UPenn
Nicholas Greger	Utah
Zhen Guo	Northeastern
Rebecca Hardenbrook	Dartmouth
Laurent Hébert-Dufresne	UVM
Michael Johansson	CDC
Sagar Kumar	Northeastern
Nicholas Landry	UVM
Chen Liang	MIT
Sayantan Nag Chowdhury	UC Davis
Anjalika Nande	Johns Hopkins
Maximilian Nguyen	Princeton
Sarah Nowak	UVM
C. Brandon Ogbunu	Yale
William Ou	University of British Columbia
Juan G. Restrepo	CU Boulder
Nicholas Roberts	UVM
Chadi Saad-Roy	UC Berkeley
Hossein Sabzian Papi	UMaine
Alex Sanchez	Princeton
Maisha Islam Sejunti	SUNY Buffalo
Zhisheng Shuai	UCF
Guillaume St-Onge	Northeastern
Jonathan St-Onge	UVM
Will Thompson	UVM

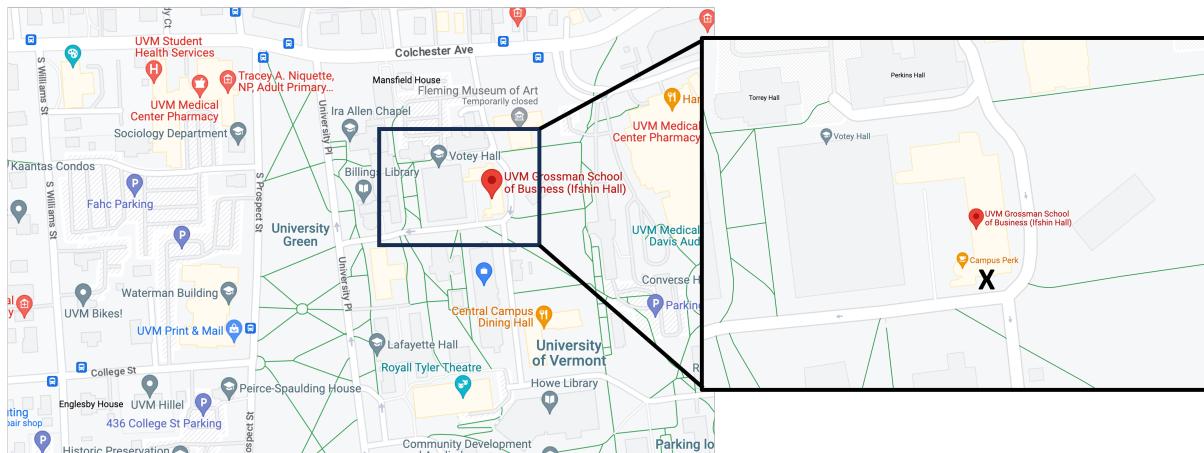
Milo Trujillo	UVM
Ling Wang	Binghamton
Tim Waring	UMaine
Erik Weis	UVM
Senay Yitbarek	UNC Chapel Hill
Jean-Gabriel Young	UVM
Juanjuan Zhang	Fudan University
Sam Zhang	CU Boulder

Useful Information

How to Get There

CCSS will be held at the UVM Grossman School of Business (Ifshin Hall) in the Keller Room (Ifshin 107). The Business School is located at 55 Colchester Ave, Burlington, VT 05405.

The most natural entrance to the Keller room is illustrated with the "X" marker below:



Food Recommendations

Breakfast

- Willow's Bagels: allergy friendly options, order ahead to beat the line
- The Café Hot: Vegetarian breakfast sandwiches, donuts
- The Skinny Pancake: The creperie chain of Vermont
- Black Cap: Nice sandwiches, scones, and coffee.

Lunch

- Folino's: Sourdough, wood-fired pizza
- Top of the block: Sandwiches/soup/salad
- Zabby's: Buffet by weight
- Pokeworks: Poke bowl fast food
- Pingala Cafe: Vegan food and not too far
- El Cortijo: Taqueria in a small vintage diner
- Masala Elaichi: Indian food and pretty close to campus
- Four Corners of the Earth: Legendary if you can wait a while
- Davis Center: Closest option with standard soup/sandwich options
- Kampus Kitchen: Sandwiches in a convenience store pretty close to campus

Dinner

- Folino's (Yep, it's good.)
- Citizen Cider: Lots of allergy friendly options
- Sherpa Kitchen: Nepalese food
- American Flatbread: Small New England wood-fired pizza chain
- Istanbul Kebab House: Turkish Mediterranean food

After Dinner

- Burlington Bay: Creemees
- Little Gordo Creemee Stand: Self-explanatory
- Wallflower Collective: Bar right next to Folino's

- JP's: The place to go for foosball and Karaoke

Sponsors and Partners

Sponsors

The CCSS 2023 workshop is sponsored by NSF grant 2309867.

Partners

