

Daniel Tamor Liu Citron

Curriculum Vitae

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EDUCATION AND TRAINING

Cornell University	Ithaca, NY
Ph.D. Theoretical Physics; Experimental Physics Minor	2011 – Present
M.S. Physics	2014
Committee: Christopher R. Myers, Chair; Paul Ginsparg; Paul McEuen	
University of Chicago	Chicago, IL
B.A. Physics with Honors	2009
Senior Honors Thesis: “Simulating Jamming in Granular Materials”	

PROFESSIONAL EXPERIENCE

Facebook, Inc – Contracted through PRO Unlimited	Seattle, WA
Visiting Research Scientist	2020 – Present
University of Washington	Seattle, WA
Postdoctoral Researcher	2017 – 2020
Advisor: David L. Smith	

PUBLICATIONS

Shankar Iyer, Brian Karrer, **Daniel T. Citron**, Farshad Kooti, Paige Maas, Zeyu Wang, P. Alex Dow, Alex Pompe. “Large-scale measurement of aggregate human colocation patterns for epidemiological modeling.” *In preparation*.

Daniel T. Citron, Carlos A. Guerra, Guillermo A. García, Sean L. Wu, Su Yun Kang, Katherine E. Battle, Harry S. Gibson, & David L. Smith. “Quantifying malaria acquired during travel and its role in malaria elimination.” *In preparation*.

Daniel T. Citron, Carlos A. Guerra, Andrew J. Dolgert, Sean L. Wu, John M. Henry, Héctor M. Sánchez C., & David L. Smith. “Comparing metapopulation dynamics of infectious diseases under different models of human movement.” *In review* medRxiv doi: 10.1101/2020.04.05.20054304

Carlos A. Guerra, **Daniel T. Citron**, Guillermo A. García, & David L. Smith. “Characterising malaria connectivity using malaria indicator survey data.” *Malaria journal* 18, 440 (2019). <https://doi.org/10.1186/s12936-019-3078-2>

Sean L. Wu, Héctor M. Sánchez C., John M. Henry, **Daniel T. Citron**, Qian Zhang, Kelly Compton, Biyonka Liang, Amit Verma, Derek A. Cummings, Thomas W. Scott, Anne L. Wilson, Steven W. Lindsay, Catherine L. Moyes, Penny A. Hancock, Tanya L. Russell, Thomas R. Burkot, John M. Marshall, Samson Kiware, Robert C. Reiner Jr., & David L. Smith. “Vector bionomics and vectorial capacity as emergent properties of mosquito behaviors and ecology.” *PLoS computational biology* 16, no. 4 (2020): e1007446. <https://doi.org/10.1371/journal.pcbi.1007446>

Carlos A. Guerra, Su Yun Kang, **Daniel T. Citron**, Dianna EB Hergott, Megan Perry, Jordan Smith, Wonder P. Phiri, José O. Osá Nfumu, Jeremiás N. Mba Eyono, Katherine E. Battle, Harry S. Gibson, Guillermo A. García, & David L. Smith. “Human mobility patterns and malaria importation on Bioko Island.” *Nature communications* 10, no. 1 (2019): 2332.

Daniel T. Citron and Samuel F. Way. “Network assembly of scientific communities of varying size and specificity.” *Journal of informetrics* 12, no. 1 (2018): 181-190.

Daniel T. Citron and Paul Ginsparg. “Patterns of text reuse in a scientific corpus.” *Proceedings of the National Academy of Sciences* 112, no. 1 (2015): 25-30.
doi:10.1073/pnas.1415135111

Mark L. Rivers, **Daniel T. Citron**, and Yanbin Wang. “Recent developments in computed tomography at GSECARS.” In *Developments in X-Ray Tomography VII*, vol. 7804, p. 780409. International Society for Optics and Photonics, 2010.

Xiang Cheng, German Varas, **Daniel T. Citron**, Heinrich M. Jaeger, and Sidney R. Nagel. “Collective behavior in a granular jet: Emergence of a liquid with zero surface tension.” *Physical review letters* 99, no. 18 (2007): 188001.

AWARDS & FELLOWSHIPS

NSF Graduate Research Fellowship (Cornell University) 2012

CONFERENCES AND WORKSHOPS

Metapopulation models of infectious disease dynamics are sensitive to underlying host mobility networks

Epidemics December 3-6, 2019
Contributed Presentation

Quantifying malaria acquired during travel and its role in malaria elimination on Bioko Island

ASTMH November 20-24, 2019
Poster Presentation

Sensitivity of Metapopulation Models of Infectious Disease Dynamics to Underlying Host Mobility Networks

NetSci May 27-31, 2019
Poster Presentation

Applied simulation modeling for interrupting malaria transmission on Bioko Island

7th Annual Disease Modeling Symposium April 15-17, 2019
Invited Presentation

Agent-based modeling for malaria policy

African Health Economics and Policy Association Conference March 11-14, 2019
Invited Presentation

Network analysis of mosquito habitats for controlling vector-borne pathogens
 NetSci 2018 June 11-15, 2018
 Poster Presentation

Contact network heterogeneity and persistence of endemic disease
 NetSci 2017 June 19-23, 2017
 Contributed Presentation

Network assembly in scientific collaboration networks
 International Conference on Computational Social Science June 22-26, 2016
 Poster Presentation

Network analysis of arXiv
 Santa Fe Institute Complex Systems Summer School 2015 July 3, 2015
 Contributed Presentation

Moment closure analysis of SIRS disease model on heterogeneous networks
 APS March Meeting 2015 March 2-6, 2015
 Contributed Presentation

Accounting for fluctuations in stochastic SIRS model on networks
 International Workshop on Advances in Discrete Networks December 12-14, 2014
 Poster Presentation

TEACHING

Instructor Cornell University
 Physics GRE Preparation Short Course Spring 2013, 2014, 2015, 2016

Teaching Assistant Cornell University
 Electricity and Magnetism (honors sequence) Spring 2016
 Mechanics and Special Relativity (honors sequence) Fall 2014, 2015
 Introduction to Electricity and Magnetism Spring 2012
 Mechanics and Heat Fall 2011

OUTREACH AND SERVICE

Pacific Science Center Seattle, WA
 Science Communication Fellow Spring 2018 – Present

Destination Imagination Central New York
 Board Member and Volunteer Spring 2015 – Summer 2017

Graduate & Professional Students Assembly Cornell University
 Chair, Faculty Awards Committee Fall 2014 – Fall 2015
 Physics Field Representative Fall 2013 – Spring 2016

Cornell Center for Materials Research Outreach Cornell University
 Volunteer Summer 2014 – Summer 2017

Physics Graduate Society

Treasurer, Event Coordinator

University of Chicago Scavenger Hunt

Judge (event organizer)

Cornell University

Summer 2012 – Spring 2013

University of Chicago

2009 – 2015