Chandan Tankala

Contact Information	McAurthur Court 111 Department of Mathematics University of Oregon Eugene, OR 97405 USA	E-mail: chandant@uoregon.edu Website: https://chandantankala.github.io

Research Interests

Discrete probability theory and stochastic processes, analysis of mixing times of Markov chains

Education

University of Oregon, Eugene, Oregon, USA

Ph.D. candidate in Mathematics (Expected graduation: May 2024)
- Advisor: David A. Levin
- Thesis title: *Mixing times of two non-reversible Markov chains*

Texas A&M University, College Station, TX, USA

M.S. in Geophysics, 2012

National Institute of Technology, India

Bachelor's in Engineering, 2009

Employment

British Petroleum, Houston, Texas, USA
1. Geophysicist, 2012 - 2015
   Inverse problems and imaging, signal processing, stochastic optimization
2. Geophysicist intern, May - August, 2011

Journal Publications and Preprints

1. **David A. Levin, Chandan Tankala.** Fast mixing of a randomized shift-register Markov chain, *Journal of Applied Probability* 60.1 (2023): 253-266, arXiv:2109.05387

Publications in preparation

1. **Balázs Gerencsér, David A. Levin, Chandan Tankala.** Fast mixing of the biased walk on $\mathbb{Z}_n$ with shortcuts.
2. **David A. Levin, Chandan Tankala.** Mixing time of a Hamiltonian Monte-Carlo Markov chain for the Ising model.
3. **Balázs Gerencsér, David A. Levin, Chandan Tankala.** Phase transition for a biased random walk on $\mathbb{Z}_n$ with added randomness.

Invited Talks

1. University of California, Santa Barbara	**October 2023**
2. Oregon State University	**March 2023**
3. University of Washington	**November 2022**
4. University of California, Davis	**October 2021**

Teaching

University of Oregon:

1. Calculus III	**Fall 2023**
2. Calculus II	**Spring 2021, Summer 2021**
3. Calculus I	**Spring 2023, Summer 2022**
4. Business calculus	**Winter 2022, Fall 2021**
5. Introduction to statistics	**Spring 2019, Summer 2019**

	6. College algebra	**Fall 2018, Spring 2020, Fall 2020**

CONFERENCES AND WORKSHOPS ATTENDED	1. Pacific Northwest Probability Seminar, University of Washington, Seattle	**October 2022, November 2023**
	2. CRM-PIMS Summer School in Probability (Online)	**Summer 2021**
	3. Online Open Probability School, University of British Columbia (Online)	**Summer 2020**
	4. Stochastic Processes and Applications, Northwestern University, Evanston	**July 2019**

MENTORING EXPERIENCE	**Mentor** in University of Oregon's directed reading program	**2020-2022**

Reading program pairing undergraduate students with graduate student mentors. Supervised four students at University of Oregon in:
(1) stochastic processes (2) theoretical statistics (3) combinatorics (4) graph theory

COMPUTER SKILLS	Python, C++, MATLAB, R

REFERENCES	1. David A. Levin, Associate Professor, Mathematics, University of Oregon
	2. Christopher Sinclair, Associate Professor, Mathematics, University of Oregon
	3. Peter Ralph, Associate Professor, Mathematics, University of Oregon
	4. Balázs Gerencsér, Associate Professor, Alfréd Rényi Institute of Mathematics