

Minki Phillip Lee

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ACADEMIC APPOINTMENTS	Research Scientist Department of Mathematics, University of Michigan, Ann Arbor, MI	Jan 2025 – <i>present</i>
EDUCATION	University of Michigan , Ann Arbor, MI Master of Science, Mathematics (Applied Math Track) Advisor: Daniel B. Forger University of Michigan , Ann Arbor, MI Bachelor of Science, Mathematics (with Highest Honors)	Sep 2023 – Dec 2024 Sep 2020 – Dec 2024
RESEARCH INTERESTS	Mathematical biology, Bioinformatics, Computational psychiatry, Circadian rhythms, Sleep, Wearables, Nonlinear dynamics, Stochastic processes, Topological data analysis	
HONORS AND AWARDS	2025 Student Travel Grant 2024 Best Poster Presentation Award 2024 Rackham International Travel Grant 2024 Outstanding Achievement in Mathematics Award 2023 Barry M. Goldwater Scholarship 2023 Wilfred Kaplan Award in Applied Mathematics 2020-2024 Department of Mathematics Merit Scholarship 2020 Andrew J. Lum & David R. Juillet Scholarship	National Institute for Theory and Mathematics in Biology Society for Mathematical Biology University of Michigan University of Michigan Goldwater Foundation University of Michigan University of Michigan Ann Arbor Community Foundation
PUBLICATIONS	* : co-first author, † : co-corresponding author Kim R*, Fang Y, Lee MP , Kim DW, Tang Z, Sen S, Forger DB [†] , Seasonal timing and interindividual differences in shiftwork adaptation, <i>NPJ Digit. Med.</i> (2025). Mayer C*, Kim DW*, Zhang M, Lee MP , Forger DB, Burgess HJ, Moon C [†] , Predicting circadian phase in community-dwelling later-life adults using actigraphy data, <i>J. Sleep Res.</i> (2024). Lee MP* , Kim DW ^{*,†} , Fang Y, Kim R, Bohnert ASB, Sen S, Forger DB [†] , The real-world association between digital markers of circadian disruption and mental health risks, <i>NPJ Digit. Med.</i> (2024). Lee MP* , Kim DW ^{*,†} , Mayer C, Walch O, Forger DB, The combination of topological data analysis and mathematical modeling improves sleep stage prediction from consumer-grade wearables, <i>J. Biol. Rhythms</i> (2024). Lee MP* , Hoang K*, Park S, Song YM, Joo EY, Chang W [†] , Kim JH [†] , Kim JK [†] , Imputing missing sleep data from wearables with neural network in real-world settings, <i>Sleep</i> (2023). Kim DW*, Lee MP* , Forger DB [†] , Wearable data assimilation to estimate the circadian phase, <i>SIAM J. Appl. Math</i> (2023). Kim DW ^{*,†} , Mayer C*, Lee MP , Choi SW, Tewari M, Forger DB, Efficient assessment of real-world dynamics of circadian rhythms in heart rate and body temperature from wearable data, <i>J. R. Soc. Interface</i> (2023).	
PRESENTATION	2025 NSF Simons Foundation NITMB MathBio Convergence Conference, Poster, Chicago, IL 2025 Biological Research Information Center Seminar, POSTECH, Online 2024 Society for Mathematical Biology Annual Meeting, Poster, Seoul, South Korea 2024 Society for Research on Biological Rhythms Biennial Meeting, Poster, San Juan, Puerto Rico	

2023 SIAM Great Lakes Section Annual Meeting, Contributed talk, Lansing, MI, USA
2022 SIAM Great Lakes Section Annual Meeting, Minisymposium, Detroit, MI, USA
2022 IBS Biomedical Mathematics Seminar, Daejeon, South Korea
2022 Annual Conference of Korean Society for Industrial and Applied Mathematics, Poster, Daejeon, South Korea
2021 University of Michigan Mathematics REU Seminar, Virtual

PEER REVIEW npj Biosensing, Scientific Reports
ACTIVITY