

# Sittinon Jirattikansakul

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**Date of Birth** 21st October 1992 **Website** [www.math.tau.ac.il/~sittinon/](http://www.math.tau.ac.il/~sittinon/)  
**Nationality** Thai

## Education

**October 2021-September 2023** **Tel Aviv University, Israel**  
Postdoctoral researcher  
Supervised by: **Moti Gitik**

**2016 -August 2021** **Carnegie Mellon University, USA**  
Ph.D. in Pure and Applied Logic, Mathematical Sciences  
Ph.D. Advisor: **James Cummings**  
Thesis Title: Blowing up the power of a singular cardinal of any cofinality with collapses

**2011-2015** **Chulalongkorn University, Thailand**  
B.S.

## Teaching Experience

**2016-2021** **Teaching Assistant and Grader Carnegie Mellon University**  
Summer 2021 21-241 Matrices and Linear Transformations (Grader)  
Spring 2021 21-329 Set Theory (Grader)  
Fall 2020 21-240 Matrix Algebra and Applications (TA)  
Summer 2020 21-241 Matrices and Linear Transformations (Grader)  
Spring 2020 21-375 Topics in Algebra: Mathematical Paradoxes (Grader)  
Fall 2019 21-341 Linear Algebra (Grader)  
21-240 Matrix Algebra and Applications (TA)  
21-127 Concepts of Mathematics (Grader)  
Spring 2019 21-240 Matrix Algebra and Applications (TA)  
Fall 2018 21-256 Multivariate Analysis (Grader)  
Summer 2018 21-127 Concepts of Mathematics (Grader)  
Spring 2018 21-256 Multivariate Analysis (TA)  
Fall 2017 21-341 Linear Algebra (Grader)  
21-300 Basic Logic (Grader)  
Spring 2017 21-373 Algebraic Structure (Grader)  
Fall 2016 21-300 Basic Logic (Grader)

2014 **Teaching assistant in Mathematics Olympiad Program**  
Taught students to read and write mathematical proofs  
Thailand

2011-2012 **Tutor for Calculus in the Tutor Project**  
Taught Calculus I and II to the freshmen in the Faculty of Science  
Chulalongkorn University, Thailand

## Research interests

Mathematical logic. Specifically on Set theory. Focus on forcings, large cardinals, infinitary combinatorics. My current main focus is on Prikry-type forcings and combinatorics on singular cardinals and their successors.

## Publications

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|---------------|---|
| June 2023     | <b>Extender-based Magidor-Radin forcings without top extenders</b><br>with Moti Gitik<br>Submitted  |
| February 2023 | <b>A small ultrafilter number at every singular cardinal</b><br>with Tom Benhamou<br>Submitted  |
| June 2022     | <b>Another method to add a closed unbounded set of former regulars</b><br>with Moti Gitik<br>Submitted  |
| December 2021 | <b>Forcing from overlapping supercompact extenders</b><br>Submitted   |
| October 2020  | <b>Blowing up the power of a singular cardinal of uncountable cofinality with collapses</b><br>Annals of Pure and Applied Logic, Volume 174, Issue 6, 2023<br><a href="https://doi.org/10.1016/j.apal.2023.103257">https://doi.org/10.1016/j.apal.2023.103257</a> . |

## Organizations

Fall 2020

**Organizer, Set Theory and Model Theory seminar for grad students (GSTMT seminar)**  
Carnegie Mellon University, USA

## Contributed Talks

Spring 2023

**Silver's theorem on weak square**  
TAU logic seminar, Tel Aviv University, Israel

Summer 2022

**Some combinatorics at singular cardinals**  
Logic conference, Chulalongkorn University, Thailand  
**Adding a club of former regulars to an inaccessible cardinal**  
SETTOP, Serbia

Spring 2022

**Supercompact extender-based forcing**  
TAU logic seminar, Tel Aviv University, Israel

Fall 2021

**An introduction to nonstandard analysis**  
TAU Postdoc/graduate student seminar, Tel Aviv University, Israel

Spring 2021

**Large cardinals and extenders**  
GSTMT seminar, Carnegie Mellon University, USA

Fall 2020

**Blowing up the power of a singular cardinal of uncountable cofinality with collapses**  
RIMS set theory workshop, Kyoto University Research Institute for Mathematical Sciences, Japan

**Some applications of large cardinals**  
Chulalongkorn University, Thailand

**An introduction to the Keisler's order**  
GSTMT seminar, Carnegie Mellon University, USA

**Squished forcing**  
GSTMT seminar, Carnegie Mellon University, USA

Spring 2020

**A history of SCH**  
GSTMT seminar, Carnegie Mellon University, USA

Spring 2020

**Introduction to stationary reflections and squares**  
GSTMT seminar, Carnegie Mellon University, USA

Fall 2019-Spring 2020

**Introduction to Proper forcings**  
GSTMT seminar, Carnegie Mellon University, USA

Fall 2019

**Silver's theorem**  
GSTMT seminar, Carnegie Mellon University, USA

Spring 2019

**Approachability Property**  
GSTMT seminar, Carnegie Mellon University, USA

Fall 2018

**Prikry forcings and supercompact Prikry forcings**  
GSTMT seminar, Carnegie Mellon University, USA

## Attended conferences/ workshops

August 2022

**Young Set Theory Workshop**  
Novi Sad, Serbia

**SETTOP**  
Novi Sad, Serbia

July 2022

**Advances in set theory**  
The Hebrew University of Jerusalem, Israel

May 2019

**Logic Fest in the Windy City**  
Chicago, Illinois, USA

June 2018

**11TH YOUNG SET THEORY WORKSHOP**

Lausanne, Switzerland

May 2018

**Association for Symbolic Logic 2018 North American Annual Meeting**

Macomb, Illinois, USA

Jan-Feb 2018

**Winter School in Abstract Analysis 2018, section Set theory Topology**

Hejnice, Czech Republic

## Non-academic skills

August 2021-present

### **Some basic Python**

#### **Have taken the courses (from Coursera):**

Programming for Everybody (Getting Started with Python)

Python Data Structures

Using Python to Access Web Data

Algorithmic Toolbox

Introduction to Data Science in Python

#### **Currently taking (from Coursera):**

Machine Learning

Applied Plotting, Charting Data Representation in Python