

# Weerapat Satitkanitkul

## Curriculum Vitae

University of Bath  
Department of Mathematical Sciences  
Claverton Down  
4W 5.8  
☎ +44 (0) 74 603 69169  
✉ [weerapat.satit@gmail.com](mailto:weerapat.satit@gmail.com)  
🌐 <http://people.bath.ac.uk/ws250>

## Research Interests

- Probability Theory**
- Lévy processes
  - Markov Additive Processes
  - Self-similar Markov Processes
  - Fluctuation Theory
  - Markov Renewal Theory
  - Stable Processes
  - Martingales
  - Applied Probability

## Educational Background

2015

**PhD in Mathematics, University of Bath, UK.**

**Self-similar Markov Processes and Fluctuation Theory of Markov Additive Processes**

Working under supervisions of Andreas Kyprianou (Bath) and Victor Rivero (CIMAT). I study self-similar Markov Processes as an exponential time changed Markov Additive Processes. The main questions concern the fluctuation theory for the processes. This normally requires the use of Markov Renewal Theory and Excursion Theory for Markov processes to tackle the problem (funded by DPST)

2013  
2014

**MSc in Mathematical Sciences, University of Bath, UK.**

Focused mainly on Probability and Mathematical Analysis (funded by DPST)

2010  
2013

**BA, Mathematical Tripos, Magdalene College, Cambridge, UK.**

Three years degree in Mathematics (funded by DPST)

## Research Projects in Bath

**Supervisors** Co-supervised by Professor Andreas Kyprianou and Professor Victor Rivero

2014  
2015

**Matrix factorisation for real-valued stable processes (MSc Thesis).**

Further written into a Deep factorisation of the stable process. arXiv:1502.07399

2015  
2016

**Conditioned real self-similar Markov processes.**

Submitted arXiv:1510.01781

2016  
2017

**Deep Factorisation of the Stable Process III : Radial Excursion Theory and the Point of Closest Reach (In progress).**

Submitted arXiv:1706.09924

---

## Teaching Assistant

As a teaching assistant, I prepare and deliver tutorials to undergraduate students. The structure of a tutorial includes giving remarks on previous problem sheet, summarising contents from lectures and providing hints for the next sheet

2015

---

### **Analysis 2B (2014-2015, 2015-2016).**

Analysis for Vector Calculus

2015

---

### **Analysis 2A (2015-2016).**

On Riemann integrability and Fundamental theorem of Calculus

2016

---

### **Ordinary differential equations and control (2016-2017).**

System of Linear ODE and Riccati-Control Equation

2017

---

### **Analysis 2B (2016-2017).**

Differential Calculus in general complete norm spaces and Complex Analysis

---

## Skills

Languages	Thai (native), English (Fluent), Spanish (Elementary)
Programming	MATLAB, Python, R, $\LaTeX$ , HTML

---

## Participation In Events

2015

---

**XII Symposium on Probability and Stochastic Processes**, Merida, Mexico.

2016

---

**8th International Conference on Lévy Processes**, Angers, France.

2016

---

**Stable Processes**, Oaxaca, Mexico.

---

## Other Professional Experiences

2011

---

**Actuarial Trainee**, *Team Excellence Consulting Co., Ltd.*

Studied non-life Actuarial models that might be adapted in the future

---

## Other Certificates

<b>Programming</b>	<i>Data Science Specialization</i> Johns Hopkins Bloomberg School of Public Health & Coursera
	<i>Machine Learning</i> Stanford University & Coursera
<b>Risk Management</b>	<i>Financial Engineering and Risk Management Part I</i> Columbia University & Coursera

---

## References

**Andreas E. Kyprianou**  
Professor of Probability Theory  
Dept. of Mathematical Sciences  
University of Bath  
Bath, UK  
✉ a.kyprianou@bath.ac.uk

**Victor M. Rivero**  
Head of Department  
Probability and Statistics  
CIMAT A. C.  
Guanajuato, Mexico  
✉ rivero@cimat.mx