

Pun Wai Tong

University of California – San Diego
9500 Gilman Dr.
La Jolla, CA 92093 USA

www.math.ucsd.edu/~p1tong

p1tong@ucsd.edu

858-699-9664

Education

- [University of California, San Diego](#) La Jolla, CA
Ph.D. Mathematics
- Ph.D. advisor: Professor [Bruce Driver](#) expected spring 2016
- [The Chinese University of Hong Kong](#)
Master of Philosophy in Mathematics July, 2009
- Thesis adviser: Professor [Luen Fai Tam](#)
- [The Chinese University of Hong Kong](#) July, 2007
B.S., Major: Mathematics, Minor: Economics
- Graduated with Second Upper Honors in Mathematics.

Selected Awards and Fellowships

- Inamori Fellowship 2013-2014
- Dean 's Honors List, [The Chinese University of Hong Kong](#) 2006-2007
- College Certificate of Academic Merit, [The Chinese University of Hong Kong](#) 2004-2007

Research Interests

- Mathematical Physics, Probability, PDE, functional Analysis, Machine Learning, Differential Geometry, Quantum Physics and Mathematical Biology
- Full [research statement](#) available on web page

Publications

- Samad Jahandideh, Pun Wai Tong and Adam Godzik, A Random Forest-Based Approach Of Head And Neck Squamous Cell Carcinoma Using Functional Proteomic Data (under preparation).
- Bruce K. Driver and Pun Wai Tong, On The Classical Limit Of Quantum Mechanics I, <http://arxiv.org/abs/1511.02447>, 2015.
- Bruce K. Driver and Pun Wai Tong, Powers Of Symmetric Differential Operators I, <http://arxiv.org/abs/1511.04008>, 2015.
- Pun Wai Tong, [Causality, Conjugate points and Singularity Theorem in space-time](#), Master Dissertation, [The Chinese University of Hong Kong](#), 2009. Advisor: Professor [Tam, Luen Fai](#).

Conference and Seminar

- Mathematical Physics Seminar, "The Classical Limit of Quantum Mechanics", Caltech, Pasadena, CA, USA, 2/2015, contributed talk
- Stochastic Partial Differential Equations Summer School, MSRI, Berkeley, CA, USA, 7/2014
- Advancement to Candidacy Talk, UCSD, San Diego, CA, USA, 6/2012, "Semi-Classical Limit and Mean Field Limit in Quantum", contributed talk
- Geometry Seminar, UCSD, San Diego CA, US, 1/2011, "Singularity Theorems in Space-Time", contributed talk

Academic Appointments

- [University of California, San Diego](#) La Jolla, CA
Teaching Assistant 2010-2016
 - Instructed discussion session incorporating interactive, 2-way questioning curriculum
 - Developed and maintained class website to summarize the content of each discussion session and engage diverse students
 - Courses assisted: Pre-Calculus, Calculus for Science and Engineering, Vector Calculus, Linear Algebra, Introduction to Partial Differential Equations, Differential Geometry, Ordinary Differential Equations, Complex Analysis
- [The Chinese University of Hong Kong](#) Hong Kong, CHINA
Teaching Assistant 2007-2009
 - Instructed discussion session, maintained a class website and provided solutions of homework and exams.
 - Courses assisted: Advanced Calculus, Fourier Analysis, Complex Variables & its Applications
- [EYMPT](#) Hong Kong CHINA
Tutor Leader Summer, 2007
 - Organized other tutors to instruct a discussion session and graded exams
 - Courses assisted: Towards Differential Geometry

Industry Experience

- [Sanford Burnham Prebys Medical Discovery Institute](#), La Jolla, USA
Intern Summer, 2015
 - Built a novel model to predict cancer patients' survival rate, cancer stage and remaining lifespan based on functional cancer proteomics data.
 - Developed a new method to pick up the optimal set of features to train the biomedical data and improve prediction in terms of the following measures: sensitivity, specificity, Matthews correlation coefficient (MCC) and AUC.
- [China Light Power Hong Kong Ltd.](#) Hong Kong, CHINA
Intern Summer, 2005
 - Built a mathematical model (queuing model) to estimate the waiting time of an incoming call helping to allocate the appropriate manpower in a call center
 - Designed a VBA program to run the model successfully

Other Work

- Tzu Chi Foundation Oceanside, US(1/2010)
Volunteer teacher 2012-2015
 - Tutored middle grade students mathematics and helped their homework.