# Man-Chun LEE Curriculum Vitae

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## **Education**

Ph.D. in Mathematics | 2018 | The Chinese University of Hong Kong

· Advisor: Prof. Luen-Fai TAM

M.Phil. in Mathematics | 2015 | The Chinese University of Hong Kong

B.Sc. in Mathematics | 2013 | The Chinese University of Hong Kong

#### **Research Interest**

Riemannian Geometry, Analysis of PDEs, Geometric flow

### **Honors, Grants and Awards**

- 1. Reaching Out Award, HKSAR Government Scholarship Fund, 2015-2016
- Professor Hing Sun Luk Scholarship for Mathematics, The Chinese University of Hong Kong,
  2012-2013
- 3. **Dr. Chao Yong Chi-Hsing Mathematics Scholarship,** The Chinese University of Hong Kong, 2011-2012
- 4. **Entrance scholarship**, The Chinese University of Hong Kong, 2010-2011

# **Publications and Preprints**

- 1. (With S. Huang, L-F. Tam, F. Tong) Longtime existence of Kaehler Ricci flow and holomorphic sectional curvature. arXiv:1805.12328.
- 2. (With John. Ma) Uniqueness theorems for non-compact mean curvature flow with possibly unbounded curvatures. arXiv:1709.00253, submitted.
- 3. (With L-F. Tam) Chern-Ricci flows on noncompact manifolds. arXiv:1708.00141, accepted by JDG.
- 4. On the uniqueness of Ricci flow. arXiv:1706.06848, submitted.
- 5. (With L-F. Tam) On existence and curvature estimates of Ricci flow. arXiv:1702.02667, submitted.

#### **Presentations**

- 1. "Chern Ricci flow on noncompact manifolds with applications", The Geometric Analysis Seminar at School of Mathematical Sciences, Xiamen University, June 2018.
- 2. "Chern Ricci flow on noncompact manifolds with applications", Seminar on pure mathematics, The Hong Kong University of Science and Technology, Dec 2017.
- 3. "Chern Ricci flow on noncompact manifolds with applications", Seminar of Geometry and its relatives, Yau Mathematical Sciences Center Tsinghua University, Dec 2017.
- 4. "Chern Ricci flow on noncompact manifolds with applications", Joint Geometric Analysis Seminar, CUHK & IMS, Sep 2017
- 5. "A note on existence of Ricci flow", Geometric Analysis Working Seminar, CUHK, Mar 2017.
- 6. "Ricci flow on asymptotically flat manifolds", Geometric Analysis Working Seminar, CUHK, Sep 2016.
- 7. "Function Theory on Complete Kaehler manifolds", Geometric Analysis Working Seminar, CUHK, Mar 2016.

## **Selected Workshops and Conferences Attended**

- 1. 2018 International Conference on Geometric Analysis at Tsinghua University, Yau Mathematical Sciences Center, Tsinghua University, May 2018
- 2. Young Geometric Analysts' Forum 2018, Tsinghua University, Jan 2018.
- 3.2018 Taipei Conference on Geometric Invariance and Partial Differential Equations, National Taiwan University, Jan 2018.
- 4. Seminar of Geometry and its relatives, Yau Mathematical Sciences Center, Tsinghua University, Dec 2017.
- 5. The 7th International Congress of Chinese Mathematicians, Tsinghua University, Aug 2016.
- 6. The Third Taiwan international Conference on Differential Geometry, National Taiwan University, Jan, 2016.
- 7. Workshop on Probability and PDEs, CUHK, Apr 2015.
- 8. The Fourth Joint China-Australia Conference on Nonlinear Partial Differential Equations and Related Topics, CUHK, Nov 2014.
- 9. Mini-workshop on Differential Geometry, CUHK, Dec 2014.

## **Teaching Experience**

The Chinese University of Hong Kong

Summer Term 2012 -Number Theory and Cryptography

• Summer Term 2013 -Geometric Perspectives of Complex Numbers

• Fall Term 2013 -Elementary Mathematical Analysis I, Calculus for Engineering

Spring Term 2014
 Fall Term 2014
 Spring Term 2015
 Elementary Mathematical Analysis I
 Elementary Mathematical Analysis II

• Fall Term 2015 -Complex Analysis

• Spring Term 2016 -Elementary Mathematical Analysis II

Fall Term 2016 -Complex AnalysisSpring Term 2017 -Real Analysis

• Fall Term 2017 -Elementary Mathematical Analysis I

• Spring Term 2018 -Real Analysis

## **Skills**

1. Knowledge in programming language: C, C++, Matlab.

2. Proficiency in MS Word, Excel, PowerPoint, Latex.

3. Native Cantonese, fluent English and Mandarin.

#### References

Professor Luen-Fai Tam Professor Albert Chau

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Professor Lei Ni

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Professor Martin Man-Chun Li

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Professor Po-Lam Yung (teaching)

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