

# CURRICULUM VITAE

for

**Man Chun LEUNG**

**Education:** Ph.D., Mathematics, University of Michigan, Ann Arbor, **1986-1991**  
Thesis supervisor: Professor Daniel Burns  
B.Sc., Mathematics and Physics (Honours), University of Hong Kong, 1985

**Research Area:** Nonlinear Partial Differential Equations  
Riemannian Geometry  
Analysis on Manifolds

**Teaching Experience:** Associate Professor, National University of Singapore, 2002-  
Senior Lecturer, National University of Singapore, 1997-2001  
Lecturer, National University of Singapore, 1991-1997  
Teaching Assistant, University of Michigan, 9/1988 - 6/1991  
Teaching Fellow, University of Hong Kong, 9/1985 - 6/1986  
Supervisor of 2 master theses and 8 honours projects.

**Visiting Member:** National Center for Theoretical Sciences, Taiwan, Sept. 2001  
Stanford University, Stanford, 1/99 - 5/99  
Rutgers University, New Brunswick, 8/98 - 12/98  
Math. Sciences Research Inst. (**MSRI**), Berkeley, 4/1994 - 6/1994  
Chinese University of Hong Kong, 4/1993 - 5/1993

**Talks:** Fifth European Conference on Elliptic and Parabolic Problems, Gaeta, Italy, 2004.

- IMS Program on Geometry and Partial Differential Equations, 2004.
- NUS Workshop on Partial Differential Equations, 2002.
- Singapore International Symposium on Topology and Geometry, 2001.
- Y 2K International Conference on Dynamical Systems and Diff. Eqns., Atlanta, 2000
- Fourth Pacific Rim Geometry Conference, Vancouver, 1998
- Eighth Lehigh University Geometry and Topology Conference, Bethlehem, 1997
- International Conference on Dynamical Systems and Differential Equations, Missouri, 1996
- Second Pacific Rim Geometry Conference, Singapore, 1994
- First Pacific Rim Geometry Conference, Hong Kong, 1992
- AMS Summer Research Institute on Differential Geometry, UCLA, 1990
- Topology and Geometry Seminar, 1993, 95, 97, 2002 & 04.

## Professional Services:

- Editor, (AMS) Contemporary Math. Vol 314: Commemorating SISTAG, (2002).
- Referee for professional journals and book, such as Journal of Geometric Analysis, Comm. in Partial Differential Equations, Pacific Journal of Mathematics, Journal of Mathematical Analysis and Applications, Cubo, Houston Mathematical Journal, and Featured Reviews – Mathematical Reviews.
- Reviewer of Mathematical Review (over 100 reviews, including 2 Featured Reviews and 10 book reviews).
- Organizer of the program on Geometric Partial Differential Equations, IMS, 2004.
- Organizer of the Singapore International Symposium on Topology and Geometry, 2001.
- Organizer of the Second Pacific Rim Geometry Conference, 1994.
- Member of the University Library Committee, 1996 – present.

## Selected Publications ( Complete list in Publications and Preprints.)

1. *Combining solutions of semilinear partial differential equations in  $\mathbb{R}^n$  with critical Sobolev exponent*, Comm. Partial Differential Equations **29** (2004), 763–784. .
2. *Blow-up solutions of nonlinear elliptic equations in  $\mathbb{R}^n$  with critical exponent*, Math. Ann. **327** (2003), 723–744.
3. (with J. Berrick & X.-W. Xu) *Topology and Geometry: Commemorating SISTAG*, Contemporary Mathematics, Vol. **314**. American Mathematical Society, Providence, RI, 2002. (263 pages).
4. *Exotic solutions of the conformal scalar curvature equation in  $\mathbb{R}^n$* , Annales de l’Institut Henri Poincaré - Analyse Non Lineaire **18** (2001), 297–307.
5. (with L.-F. Cheung & C.-K. Law) *Bounded positive solutions of rotationally symmetric harmonic maps equations*, Differential and Integral Equations **13** (2000), 1149–1188 (40 pages).
6. *Asymptotic behavior of positive solutions to the equation  $\Delta_g u + Ku^p = 0$  in a complete Riemannian manifold and positive scalar curvature*, Comm. Partial Differential Equations **24** (1999), 425–462 (38 pages).
7. *Conformal deformation of warped products and scalar curvature functions on open manifolds*, Bulletin des Sciences Mathématiques **122** (1998), 369–398.
8. *On the  $L^{n/2}$ -norm of scalar curvature*, Illinois J. Math. **40** (1996), 606–631.
9. *Conformal scalar curvature equations on complete manifolds*, Comm. Partial Differential Equations **20** (1995), 367–417 (51 pages).
10. *Pinching theorem on asymptotically hyperbolic spaces*, Internat. J. Math. **4** (1993), 831–857.