Wanmin Liu

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EMPLOYMENT

KTH Royal Institute of Technology   Stockholm, SE
Vikarie, Teaching Assistant (Part time), Department of Mathematics.   2021/09 – 2023/11 and 2024/08 – 2024/11

Unemployment
Under the unemployment program by Swedish Public Employment Service   2021/01 – 2021/08

Uppsala University   Uppsala, SE
Researcher at Department of Mathematics. *Research (80%) (in geometry) & Teaching (20%)*   2019/01 – 2020/12

IBS Center for Geometry and Physics   Pohang, KR
Research Fellow (Postdoc). *Research (100%) in Algebraic Geometry*   2015/12 – 2018/11

Hong Kong University of Science and Technology   Hong Kong
Research Assistant on a part-time basis at Department of Mathematics.   2014/09 – 2015/06

EDUCATION

Hong Kong University of Science and Technology   Hong Kong
Ph.D. in Mathematics, major in Algebraic Geometry   2007/09–2015/06

- Thesis: "Bayer-Macrì decomposition on Bridgeland moduli spaces over surfaces"

Lanzhou University   Lanzhou, CN
M.S. in Mathematics, major in Partial Differential Equations   2004/09–2007/06

- Thesis: "Infinitely many solutions for two noncooperative $p(x)$-Laplacian"

Lanzhou University   Lanzhou, CN
B.S. in Mathematics   2000/09–2004/06

ABF Stockholm (for Swedish)   Stockholm, SE
SVA 3, godkänd. (Sfi C och D; SVA grund 2, 3, 4; SVA 1, 2, godkänd.)   2021/08–2023/05

Stockholm University and KTH   Stockholm, SE
Degree of Bachelor of Science in Upper Secondary Education   2024/01–2025/12

TEACHING

- **VFU** på Anna Whitlocks gymnasium: Matematik 1b till två programmet; Matematik 3c; Matematik 5.   2025 HT
  https://wanminliu.github.io/gymnasium/
- **VFU** på Ekens skola: årskurs 7 och 8, på olika nivå.   2025 VT
- **VFU** på Kärrtorps gymnasium: Matematik 1 till två programmet; Matematik 3; Matematik 5.   2024 VT
- **Teaching Assistant (KTH)** for LINEAR ALGEBRA, MULTIVARIABLE CALCULUS, ODE etc.   2021/2024
  Tutorial lectures, grading homework and exam. Some notes are available at https://wanminliu.github.io/KTH/
- **Lecturer (Uppsala Univ.)** for a regular course on DIFFERENTIAL GEOMETRY   Fall 2019

I designed the course topic and oral exam format. The full teaching material of 25 two hours lecture notes, with Course Plan, Homework and Oral Exam Plan, is on my webpage: https://wanminliu.github.io/doc/DG/DG.html - Lecture Notes on Differential Geometry of Curves and Surfaces, 232 pages, Uppsala University, 2019.

- **Supervise** a undergraduate student for his Bachelor Thesis, Uppsala University.   Spring 2020
- **Teaching Assistant** at at Hong Kong University of Science and Technology for various courses. All courses were taught in English and I won the **Best Teaching Assistant award** in 2011.   2008 – 2012

  COMPLEX ANALYSIS, DIFFERENTIAL GEOMETRY (TWICE), ANALYSIS, LINEAR ALGEBRA, CONCEPT IN MATHEMATICS, ORDINARY DIFFERENTIAL EQUATION, TUTORIAL TRAINING TO ALL NEW TEACHING ASSISTANTS.

PUBLICATIONS

[1] M.-L. Li and **W. Liu**, "The limits of kähler manifolds under holomorphic deformations", *Acta Math Sinica*, 12 pages, to appear 2026. arXiv: 2406.14076.

[2] **W. Liu**, *Utforskande och heuristiskt lärande i algebra på gymnasiet.* 2025, p. 32, Stockholms universitet.

[3] **W. Liu**, J. Lo, and C. Martinez, "Fourier-mukai transforms and stable sheaves on weierstrass elliptic surfaces", *Bulletin of the Brazilian Math. Soc., New Series*, vol. to appear, 2024. arXiv: 1910.02477.

[4] Y.-W. Fan, C. Li, **W. Liu**, and Y. Qiu, "Contractibility of space of stability conditions on the projective plane via global dimension function", *Mathematical Research Letters*, vol. 30, no. 1, pp. 51–86, 2023.

[5] **W. Liu**, S. Yang, and X. Yu, "Classification of full exceptional collections of line bundles on three blow-ups of $\mathbb{P}^3$", *Journal of the Korean Mathematical Society*, vol. 56, no. 2, pp. 387–419, 2019.

[6] **W. Liu**, "Bayer-Macrì decomposition on Bridgeland moduli spaces over surfaces", *Kyoto Journal of Mathematics*, vol. 58, no. 3, pp. 595–621, 2018.

[7] **W. Liu**, *Bayer-Macrì decomposition on Bridgeland moduli spaces over surfaces.* 2015, 91 pages, Thesis (Ph.D.)–Hong Kong University of Science and Technology (Hong Kong), ISBN: 978-1369-27062-4.

[8] L. Wang and **W. Liu**, "Online publishing via pdf2htmlEX", *TUGboat*, vol. 34, no. 3, pp. 313–324, 2013.

[9] **W. Liu**, *Infinitely many solutions for two noncooperative $p(x)$ -Laplacian elliptic systems.* 2007, Thesis (Master)–Lanzhou University (China).

[10] X. Fan and **W. Liu**, "An exact inequality involving Luxemburg norm and conjugate-Orlicz norm in $L^{p(x)}(\Omega)$", *Chinese Annals of Mathematics. Series A*, vol. 27, no. 2, pp. 177–188, 2006.

SKILLS

- **Programming:** SageMath, C++

- **Tools/Techs:** LaTeX, Git, Linux, pdf2htmlEX

LANGUAGES

- **English:** Proficient.
- **Chinese:** Mother tongue, native speaker
- **Swedish:** SVA 3, approved.

SOFTWARE

I am one of authors of the open-sourced (GPLv3+) package **pdf2htmlEX - Convert PDF to HTML without losing text or format**, which gets **9.5k** Star in GitHub.
https://github.com/coolwanglu/pdf2htmlEX

SERVICES

Reviewer of *zbMATH Open* (already written 9 reviews) and *American Mathematical Society - Mathematical Reviews* (already written 3 reviews).
Organizer of an international *Workshop on Moduli theory & Derived category*, IBS Center for Geometry and Physics, Pohang, South Korea, 2018 Nov.

Updated: March 3, 2026