

CURRICULUM VITAE

Personal information

Family name, Wang; First name: Xu
Date of birth: Nov 13th 1987
E-mail: wangxu1113@gmail.com
Married, one baby.

Education

2009-07-01 — 2014-06-13 PhD, Tongji University, China.
Adviser: Prof. Bo-Yong Chen.
Thesis: "Variational properties of the Bergman kernel" (In Chinese).
2005-09-01 — 2009-06-30 Bachelors degree, Tongji University, China.

Employment

From 2017-06 Associate Professor at NTNU.
2015-06-15 — 2017-06 Postdoc at Chalmers. Adviser: Prof. Bo Berndtsson.
2014-06-24 — 2017-06 Postdoc at Fudan University, China. Adviser: Prof. Qingchun Ji.

Funding

2017- Onsager fellowship
2015-2017 Grant: Knut och Alice Wallenbergs Stiftelse (with Prof. Bo Berndtsson).
2015-2017 China Postdoctoral Science Foundation (first class).

Short term visits

2014-01-16—2014-04-10 Chalmers, Sweden. Vistor of Prof. Bo Berndtsson
2017-09-13 Stavanger University. Vistor of Prof. Alexander Rashkovskii

Invited talks

2017 Sep, *On and around the Brascamp-Lieb proof*, Mini-workshop in Stavanger.
2017 July, *Variation of Lefschetz star operator*, Symposium in Geometry and Differential Equations, Morningside Mathematics Center, Beijing.
2016 Dec, *Two canonical Higgs field structures*, KASS seminar in Chalmers, Sweden.
2016 Aug, *Curvature restrictions on a manifold with a flat Higgs bundle*, "Complex Geometry and the Cauchy-Riemann Equation", for 70's birthday of Prof. John Erik Fornaess, Oslo, Norway.
2016 Jul, *Relative $\bar{\partial}$ -complex and its curvature properties*, Hayama Symposium on Complex Analysis in Several Variables, Tokyo, Japan.
2015 Aug, *Relation between positivity of the direct image sheaf and variation of the Green energy*, KASS seminar in Chalmers, Sweden.

Date: September 21, 2017.

2014 Apr, *Variational formula for the Bergman kernel*, complex analysis seminar in Jagiellonian University.

2014 Feb, *Plurisubharmonicity of the Bergman projection*, KASS seminar in Chalmers, Sweden.

2013 Jul, *An invariant in the $\bar{\partial}$ -equation*, Young Mathematician Workshop on Several Complex Variables, Nagoya, Japan.

2013 Jul, *Variation of the Bergman kernels*, Hayama Symposium on Complex Analysis in Several Variables, Tokyo, Japan.

Other experience

Reviewing papers for journals: Math Z.

Research assistant of Prof. Bo-Yong Chen, as a vice-adviser of PhD student Ju-Jie Wu and graduate student Qing-Yuan Meng

One week host for Prof. Dano Kim, Seoul National University, 2016

One week host for Postdoc Ya Deng, IRMA, Strasbourg, Sep 2017.

PUBLICATIONS AND PREPRINTS

Publications in peer-reviewed journals

- (1) X. Wang, *A curvature formula associated to a family of pseudoconvex domains*, Annales de l'Institut Fourier, (2017)
- (2) B.Y. Chen, J.J. Wu and X. Wang, *Ohsawa-Takegoshi type theorem and extension of plurisubharmonic functions*, Math. Ann. (2015)
- (3) X. Wang, *Effective Very Ampleness of the Canonical Line Bundles on Ball Quotients*, J. Geom. Anal. (2015).
- (4) B.Y. Chen and X. Wang, *Holomorphic maps with large images*, J. Geom. Anal. (2015)
- (5) X. Wang, *Hyperconvexity of non-smooth pseudoconvex domains*, Ann. Polon. Math. (2014)
- (6) X. Wang, *Bergman completeness is not a quasi-conformal invariant*, Proc. Amer. Math. Soc. (2013)

Preprints

- (1) X. Wang, *Notes on variation of Lefschetz star operator and T-Hodge theory*, arXiv:1708.07332.
- (2) X. Wang, *A remark on the Alexandrov-Fenchel inequality*, arXiv:1705.09933.
- (3) B. Berndtsson, M. Păun and X. Wang, *Algebraic fiber spaces and curvature of higher direct images*, arXiv:1704.02279.
- (4) X. Wang, *A flat Higgs bundle structure on the complexified Kähler cone*, arXiv:1612.02182.
- (5) X. Wang, *Relative $\bar{\partial}$ -complex and its curvature properties*, arXiv:1607.03634.
- (6) X. Wang, *Curvature restrictions on a manifold with a flat Higgs bundle*, arXiv:1608.00777.
- (7) X. Wang, *Curvature of higher direct image sheaves and its application on negative-curvature criterion for the Weil-Petersson metric*, arXiv:1607.03265.
- (8) X. Wang, *Variation of Bergman kernels of pseudoconvex domains*, arXiv:1402.1960.
- (9) X. Wang, *Variation of the Bergman kernels under deformations of complex structures*, arXiv:1307.5660.
- (10) X. Wang, *Covering stability of Bergman kernels on Kähler hyperbolic manifolds*, arXiv:1307.3685.

REFERENCES

- (1) Prof. Bo Berndtsson, *Chalmers*, bob@chalmers.se, Phone: +46 31 772 35 39
- (2) Prof. Bo-Yong Chen, *Fudan University*, boychen@fudan.edu.cn, Phone: +86 021 55665560
- (3) Prof. Qing-Chun Ji, *Fudan University*, qingchunji@fudan.edu.cn, Phone: +86 021 55664368