

# Complete Research Achievement Record

Date: 2025/07/29

Name : Shijie Bao

Books:

None

Papers:

Publications:

**Shijie Bao** and Qi'an Guan.  $L^2$  extension and effectiveness of strong openness property. *Acta Mathematica Sinica, English Series*, 38(11): 1949–1964 (2022).

**Shijie Bao** and Qi'an Guan.  $L^2$  extension and  $L^p$  effectiveness of strong openness property. *Acta Mathematica Sinica, English Series*, 39(5): 814–826 (2023).

**Shijie Bao**, Qi'an Guan and Zheng Yuan. Concavity property of minimal  $L^2$  integrals with

Lebesgue measurable gain V – Fibrations over open Riemann surfaces. *The Journal of Geometric Analysis*, 33(6): 179 (2023).

**Shijie Bao** and Qi'an Guan. Modules at boundary points, fiberwise Bergman kernels, and log–subharmonicity. *Peking Mathematical Journal*, 7: 441–470 (2024).

**Shijie Bao**, Qi'an Guan, Zhitong Mi and Zheng Yuan. Concavity property of minimal  $L^2$  integrals with Lebesgue measurable gain VII – Negligible weights. In: Hirachi, K., Ohsawa, T., Takayama, S., Kamimoto, J. (eds) *The Bergman Kernel and Related Topics*. HSSCV 2022. Springer Proceedings in Mathematics & Statistics, vol 447. Springer, Singapore (2024).

**Shijie Bao**, Qi'an Guan and Zheng Yuan. Boundary points, minimal  $L^2$  integrals and concavity property. *Mathematische Annalen*, 391: 5809–5856 (2025).

**Shijie Bao**, Qi'an Guan and Zheng Yuan. A note on  $\xi$  – Bergman kernels. *Frontiers of Mathematics*, 20(3): 481–506 (2025).

**Shijie Bao**, Qi'an Guan, Zhitong Mi and Zheng Yuan. Tame maximal weights, relative types and valuations. *Advances in Mathematics*, 477: 110364 (2025).

<https://doi.org/10.1016/j.aim.2025.110364>.

**Shijie Bao**, Qi'an Guan and Zheng Yuan. Concavity property of minimal  $L^2$  integrals with Lebesgue measurable gain VI: Fibrations over products of open Riemann surfaces. *Science China Mathematics* (2025) Published online.

<https://doi.org/10.1007/s11425-024-2390-2>.

Preprints:

**Shijie Bao** and Qi'an Guan. Modules at boundary points, fiberwise Bergman kernels, and log–subharmonicity II – On Stein manifolds. Preprint, arXiv: 2205.08044.

**Shijie Bao** and Qi'an Guan. Fiberwise Bergman kernels, vector bundles, and log–subharmonicity. Preprint, arXiv: 2210.16601.

**Shijie Bao**, Qi'an Guan and Zheng Yuan. The log–plurisubharmonicity of fiberwise  $\xi$ –Bergman kernels for variant functionals. Preprint, arXiv: 2303.16525.

**Shijie Bao**, Qi'an Guan and Zheng Yuan. Concavity property of minimal  $L^2$  integrals with Lebesgue measurable gain VIII – Partial linearity and log–concavity. Preprint, arXiv: 2307.07112.

**Shijie Bao**, Qi'an Guan, Zhitong Mi and Zheng Yuan. On the multipoled global Zhou weights and semi–continuity for Zhou numbers. Preprint, arXiv: 2311.06459.

**Shijie Bao**, Qi'an Guan and Zheng Yuan. Zhou valuations and jumping numbers. Preprint, arXiv: 2311.06565v2.

**Shijie Bao** and Qi'an Guan. Equivalence of the sharp effectiveness results of strong openness property. Preprint, arXiv: 2408.16372.

**Shijie Bao** and Qi'an Guan. Demainly's approximation of general weights. Preprint, arXiv: 2503.24109v3.

**Shijie Bao**, Qi'an Guan and Lin Zhou. Algebraic Zhou valuations. Preprint, arXiv: 2505.19451v2.

Reviews and Other (Write in chronological order)

None