

## On the stacky Manin conjecture

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**Abstract.** A height function measures “size” of a rational point on an algebraic variety. The Manin conjecture predicts the number of rational points of bounded height on varieties satisfying the property that the inverse of their canonical line bundle is big. Remarkably, certain other counting results and predictions from different subfields of number theory, such as the Malle conjecture on the number of Galois extensions of bounded discriminant, provide very reminiscent asymptotic formulas. Recently, together with Yasuda, we have developed a version of the Manin conjecture for stacks [1] which explains the phenomenon. We will discuss the conjecture and some progress on it. The content of the talk is based on a joint work with Takehiko Yasuda.

**Keywords:** Manin conjecture; Deligne–Mumford stacks; heights.

### References

- [1] **R. Darda, T. Yasuda** The Batyrev–Manin conjecture for Deligne–Mumford stacks. *Accepted for Journal of European Mathematical Society*, 2024