## NUMBER THEORY SEMINAR

## A Central Limit Theorem for Liouville-Ising Models and Applications in Analytic Number Theory

## Leandro Cioletti MAT-UnB

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Auditorium do MAT

**Abstract**. In this seminar we introduce the Liouville-Ising measure, which is a measure on a Cantor set supported on the Liouville sequence. We show how to prove a central limit type theorem for for the coordinate process distributed following this measure and discuss its consequences on Analytic Number Theory. In particular, we show that the continuity of the Liouville path on the space of probability measures endowed with the total variation norm is related to the Riemman Hypothesis.

## References

[1] Liouville-Ising Model. Preprint. L. Cioletti, S. Gallo and D. Takahashi