



YEDİTEPE UNIVERSITY

MATHEMATICS DEPARTMENT SEMINARS

Laurent Series in Positive Characteristic: Axiomatization Problems

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Abstract: Laurent Series in Positive Characteristic: Axiomatization Problems Valued fields combine algebraic and analytic structures through valuations. This talk focuses on axiomatization and decidability problems for Laurent series fields in positive characteristic. After surveying classical results, I will present my contributions on valued fields equipped with endomorphisms—a natural framework in characteristic p where the Frobenius map provides a canonical self-endomorphism—and discuss axiomatization challenges for the field of Laurent series over the prime field of characteristic p (resp. over algebraically closed fields of characteristic p). The presentation will remain accessible to non-specialists.

Date: 7 November 2025, Friday

Time: 13:00

Place: Seminar Room



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