

Frankfurter Seminar Kolloquium des Instituts für Mathematik Wintersemester 2023/24

Frankfurter Seminar, 8. November 2023 Annette Huber-Klawitter (Universität Freiburg)

Linear Relations of 1-Periods

1-Periods are complex numbers obtained by integrating an algebraic 1-form defined over the rational numbers (e.g. $\frac{dx}{x}$) over a chain with algebraic end points. The set contains many interesting numbers (e.g. the values of the logarithm function in algebraic numbers). Their transcendence and the relations between them are a classical question of transcendence theory.

We now have a complete picture, explaining the relations qualitatively in terms of obvious relations and also quantitatively, by which we mean dimension formulas.

In the talk we are going to explain some of these general results and then discuss the application to the values of the hypergeometric function, recovering results of Wolfart. (joint work with G. Wüstholz)

Tee ab 16:15 Uhr

Robert-Mayer-Straße 10 | Raum 711

Ginkgo-Seminar 15:15 - 16:00 Uhr

Marcin Lara Introduction to transcendence theory

Teilnahme nur für Studierende, Promovierende und Postdocs

Tee 16:15 - 16:45 Uhr

