GOETHE UNIVERSITÄT FRANKFURT AM MAIN

Frankfurter Seminar

Kolloquium des Instituts für Mathematik

Sommersemester 2023

28. Juni 2023

Michael Joswig (TU Berlin & MPI MiS Leipzig)

Tropical median consensus trees

In computational biology, a phylogenetic tree is the standard model for organizing ancestral relations among species or individual organisms. Since many different methods are known to construct various trees from one fixed data set, there is a need for algorithms to find the common ground. Such an algorithm gives rise to some „consensus tree“, which describes where the given trees agree.

In this talk we will present a new procedure for computing consensus trees, crucially based on methods of tropical combinatorics. We will report on theoretical analysis as well as computational experiments, also comparing with other approaches.

This is joint work with Andrei Comăneci.

Tee ab 16:15 Uhr

Robert-Mayer-Straße 10 | Raum 711

Ginkgo-Seminar 15:15 - 16:00 Uhr

Aenne Benjes An introduction to tropical convexity and the Fermat-Weber problem

Teilnahme nur für Studierende und Promovierende

Tee 16:15 - 16:45 Uhr

www.math.uni-frankfurt.de/frankfurter-seminar