SALZBURG MATHEMATICS COLLOQUIUM
Winter 2022/2023

Manuel Kauers (Linz)
„Flip Graphs for Matrix Multiplication"
December 15, 2022

Abstract:
More than 50 years after Strassen's groundbreaking discovery that 2×2 matrices can be multiplied with only 7 multiplications in the coefficient domain, the computational cost of matrix multiplication is still a mystery. Not even for 3×3 matrices the smallest number of multiplications required is known (the long-standing record is 23). For slightly larger matrices, bounds on the smallest number of multiplications have been pushed down in recent years by various authors, using various different search techniques. In the talk, we present a new search technique which allowed us to improve some of the known bounds. This is joint work with Jakob Moosbauer.

Thursday, **15:00-15:45**
Hörsaal 414, 1. Stock