Course Title: Multidimensional Continued Fractions
Lecturer: Wolfgang Steiner

We start with the (one-dimensional) regular continued fractions, their approximation properties, invariant measure as well as Euler, Lagrange and Galois' theorems on periodic continued fractions. We generalise these results to variants such as α-continued fractions, using natural extensions. We compare them with β-expansions, creating links to the lectures of Akiyama and Dajani. Then we consider various multidimensional continued fraction algorithms, their approximation properties, Lyapunov exponents, invariant measures, and natural extensions.