

## **Abstract**

Oberwolfach Workshop:

### **Diophantische Approximationen**

Dates:

**17 Apr - 23 Apr 2022** (Code: 2216)

Organizers:

**Yann Bugeaud, Strasbourg**

**Pietro Corvaja, Udine**

**Laura DeMarco, Evanston**

**Philipp Habegger, Basel**

Diophantine approximation is a branch of Number Theory that can be described as the study of the solvability of inequalities in integers, though this main theme of the subject is often unbelievably generalized. As an example, one can be interested in properties of rational points of algebraic varieties defined over an algebraic number field. The proposed workshop is concerned with a variety of problems of this kind, which have seen important progress during the last few years. Among the new developments, let us mention extensions and refinements of the (quantitative form of the) Schmidt Subspace Theorem, together with new applications; works on the Zilber-Pink conjecture and on unlikely intersections; progress in geometry of numbers and towards the Littlewood conjecture in simultaneous Diophantine approximation; the emerging new topic "Arithmetic dynamics".