

## **Abstract**

Oberwolfach Workshop:

### **Computability Theory**

Dates:

**25 April - 1 May 2021** (Code: 2117)

Organizers:

**Vasco Brattka, Neubiberg**  
**Noam Greenberg, Wellington**  
**Iskander Kalimullin, Kazan**  
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Over the last decade computability theory has seen many new and fascinating developments that have linked the subject much closer to other mathematical disciplines inside and outside of logic. This includes, for instance, work on enumeration degrees that has revealed deep and surprising relations to general topology, the work on algorithmic complexity and randomness that is closely tied to symbolic dynamics and geometric measure theory. Inside logic there are relations to model theory, set theory, effective descriptive set theory, computable analysis and reverse mathematics. In some of these cases the bridges to seemingly distant mathematical fields have yielded completely new proofs or even solutions of open problems in the respective fields. Thus, over the last decade, computability theory has formed vibrant and beneficial interactions with other mathematical fields.

The goal of this workshop is to bring together researchers representing different aspects of computability theory to discuss recent advances, and to stimulate future work.