

Preface of the Special Issue for the Oberwolfach Workshop on Computability Theory 2021

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This double issue of the journal *Computability* is a special issue dedicated to the *Oberwolfach Workshop on Computability Theory* that took place in April and May 2021 at the international mathematics research institute in Oberwolfach, Germany [1]. The workshop has covered computability theory in its entire breadth, including modern applications.

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 randomness that is closely tied to symbolic dynamics and geometric measure theory. Inside logic there are connections 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.

This special issue contains seven carefully selected articles of high calibre that have been reviewed following the usual standards of our discipline. These articles represent a cross section through topics that have been presented and discussed during the workshop. We would like to use this opportunity to thank the authors for their excellent contributions and the additional reviewers for their thorough work.

References

- [1] V. Brattka, N. Greenberg, I. Kalimullin and M. Soskova, Computability theory, *Oberwolfach Reports* **18**(2) (2021), 1149–1190, Abstracts from the workshop held April 25–May 1, 2021. doi:[10.4171/OWR/2021/21](https://doi.org/10.4171/OWR/2021/21).