

## Aspects of randomness in set theory and computability theory

**Jörg Brendle**

Kobe University, Japan

[brendle@kurt.scitec.kobe-u.ac.jp](mailto:brendle@kurt.scitec.kobe-u.ac.jp)

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We discuss an analogy between cardinal invariants of the continuum from set theory and highness properties of Turing degrees from computability theory. Particular focus will be on cardinal invariants defined in terms of null sets – and thus related to various notions of randomness. It is well-known that as Schnorr randomness corresponds to classical set-theoretic randomness, so Kurtz randomness corresponds to “avoiding all closed measure zero sets from the ground model”. Computability-theoretic analogues of cardinal invariants of the null ideal have been investigated by Rupperecht. We consider computability-theoretic analogues of cardinal invariants related to the  $\sigma$ -ideal generated by closed measure zero sets and obtain computable versions of classical results of Bartoszyński and Shelah. This is joint work with Andrew Brooke-Taylor, Selwyn Ng, and André Nies.