

[Demuth, Osvald](#)

**Remarks on the structure of tt-degrees based on constructive measure theory.** (English)

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[Commentat. Math. Univ. Carol. 29, No. 2, 233-247 \(1988\).](#)

Based on some results in constructive measure theory, classes of sets of natural numbers being of some interest from the point of view of both constructive mathematics and recursion theory are introduced and possibility of mutual tt-reducibility of their members is studied and, moreover, an arithmetization of the Lebesgue measurability of sets of reals is proposed.

**MSC:**

[03D30](#) Other degrees and reducibilities in computability and recursion theory

[28A05](#) Classes of sets (Borel fields,  $\sigma$ -rings, etc.), measurable sets, Suslin sets, analytic sets

[03F65](#) Other constructive mathematics

[03D25](#) Recursively (computably) enumerable sets and degrees

Cited in **1** Review

Cited in **13** Documents

**Keywords:**

T-reducibility; constructive function of a real variable; B- measurability; arithmetization of Lebesgue measurability of sets of reals; constructive measure theory; recursion theory; tt-reducibility

**Full Text:** [EuDML](#)