

## Towards a structure theory of Maharam algebras

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**Abstract:** A Maharam algebra is a complete Boolean algebra carrying a continuous strictly positive probability submeasure. A celebrated problem of Maharam from the 1940s asks if every such algebra is in fact a measure algebra. The problem was finally solved in 2006 by Talagrand who constructed a counterexample. We present a whole class of examples of arbitrary high exhaustivity rank and discuss some directions towards a possible structure theory of Maharam algebras. This is joint work with Z. Perovic (San Diego)