



# Testing Probabilistic Oracles

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Many algorithms in Data Analysis provide a distribution of a true parameter value given some prior and data, or predictions of future variable values with some uncertainty. We call such algorithms Probabilistic Oracles for some random variable. Simulations in which oracles are applied to artificial data in which the true value is known can be used to check deterministic oracles that provide a fixed value. However, if we want to check a probabilistic oracle, this is more difficult since every predicted distribution comes just with a single instance. In this presentation, we suggest a method to check such probabilistic oracles.

## **Biography:**

Timo von Oertzen is professor for quantitative psychology at the University of the Federal Forces, Munich. He's co-developer of several SEM software systems, including the graphical tool Onyx and the R-package OpenMx. His academic background is in computer science (dissertation 2003 from the University of the Saarland) and psychology (habilitation from the Humboldt University Berlin in 2013), with main research interests in mathematical methods in psychology and child- and youth mentoring.