



**Universität  
Zürich** UZH

Mittelbaukolloquium des Psychologischen Instituts  
Leitung: Dr. Michel Druey und Dipl.-Psych. Pamela Rackow

FS 2013

**Datum:** 08.05.2013

**Ort:** Binzmühlestrasse 14, Raum BIN 3.D.27

**Uhrzeit:** 12.30 –13.30Uhr

**Titel:** An Item Response Model of Matching Test Performance

**Referent:** Matthew Zeigenfuse

**Abstract:**

In matching tests, participants are shown two lists of items of equal length and asked to associate each element of the second list with exactly one element of the first list. Matching tests are common in psychology, and often we would like to use a participant's responses on these tests to measure their ability in the domain tested. Item response theory (IRT) models are a widely-used tool for measuring ability. However, existing IRT models cannot be applied to matching tests because they require that a participant's response to any item A be independent from their response to any other item B given their ability. This is not true on matching tests since any response to item A reduces the number of items from which a response to item B can be selected. Here, we present a novel extension to existing IRT models that solves this problem. We provide illustrations of model performance on both simulated and actual data.