

The R package fechner

Ali Ünlü

Department of Statistics, University of Dortmund
uenlue@statistik.tu-dortmund.de

I present the package fechner (Ünlü, Kiefer, & Dzhafarov, 2009) for performing Fechnerian scaling of object sets (Dzhafarov & Colonius, 2006) in R. Fechnerian scaling is a procedure for constructing a metric on a set of objects (e.g., colors, symbols, X-ray films, or even statistical models) to represent dissimilarities among the objects "from the point of view" of a system (e.g., person, technical device, or even computational algorithm) "perceiving" these objects. This metric, called Fechnerian, is computed from a data matrix of pairwise discrimination probabilities or any other pairwise measure which can be interpreted as the degree with which two objects within the set are discriminated from each other. I describe the functions of the package. Fechnerian scaling is demonstrated on real data accompanying the package.

Key words: R; Fechnerian scaling; Subjective metric; Psychophysics

References:

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