## A Gibbs Sampler for the (Extended) Marginal Rasch Model

Maris, G., Bechger, T., & San Martin, E. (2015). A Gibbs sampler for the (extended) marginal Rasch model. psychometrika, 80(4), 859-879. Accessed 28 Jun 2021.

## Abstract

In their seminal work on characterizing the manifest probabilities of latent trait models, Cressie and Holland give a theoretically important characterization of the marginal Rasch model. Because their representation of the marginal Rasch model does not involve any latent trait, nor any specific distribution of a latent trait, it opens up the possibility for constructing a Markov chain - Monte Carlo method for Bayesian inference for the marginal Rasch model that does not rely on data augmentation. Such an approach would be highly efficient as its computational cost does not depend on the number of respondents, which makes it suitable for large-scale educational measurement. In this paper, such an approach will be developed and its operating characteristics illustrated with simulated data.