## 1 GPArotation Functions

In R, the functions in this package are made available with

## > library("GPArotation")

The most complete reference for the software is: Bernaards, C.A. and Jennrich, R.I. (in press) Gradient Projection Algorithms and Software for Arbitrary Rotation Criteria in Factor Analysis. Educational and Psychological Measurement. Addition material is also available at <a href="http://www.stat.ucla.edu/research/gpa">http://www.stat.ucla.edu/research/gpa</a>.

Rotations are computed using the Gradient Projection Algorithm code, which can be called directly. Examples of this are available in the help pages for *GP-Forth* and *GPFoblq*. In R it may be most convenient to pass the rotation name to the factanal program. An example of this is

- > data(ability.cov)
- > z <- factanal(factors = 2, covmat = ability.cov, rotation="oblimin")
- > loadings(z)

Other examples are available in the help page for rotations.