

## Intro — Introduction and advice

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[M-1] Entry                      Description

## Introductory material

**First**                              Introduction and first session

**Interactive**                      Using Mata interactively

**Ado**                                Using Mata with ado-files

**help**                                Obtaining help in Stata

## How Mata works &amp; finding examples

**How**                                How Mata works

**Source**                            Viewing the source code

## Special topics

**Returned args**                      Function arguments used to return results

**Naming**                              Advice on naming functions and variables

**Limits**                                Limits and memory utilization

**Tolerance**                            Use and specification of tolerances

**Permutation**                        An aside on permutation matrices and vectors

**LAPACK**                              The LAPACK linear-algebra routines

## Description

This section provides an introduction to Mata along with reference material common to all sections.

In addition, we should mention two helpful books.

*An Introduction to Stata Programming* (412 pages) by Christopher Baum introduces Mata more gently than this manual. It assumes that you are familiar with Stata but new to programming.

*The Mata Book* (428 pages) by William Gould assumes familiarity with programming in some language, but it does not assume a lot of experience. It goes further and deeper into Mata and also covers programming, numerical accuracy, workflow, verifications, and certification.

## Remarks and examples

The most important entry in this section is [\[M-1\] First](#). Also see [\[M-6\] Glossary](#).

The Stata commands `putmata` and `getmata` are useful for moving data from Stata to Mata and back again; see [\[D\] putmata](#).

Those looking for a textbook-like introduction to Mata may want to consider [Baum \(2016\)](#), particularly chapters 13 and 14.

## References

Baum, C. F. 2016. *An Introduction to Stata Programming*. 2nd ed. College Station, TX: Stata Press.

Gould, W. W. 2018. *The Mata Book: A Book for Serious Programmers and Those Who Want to Be*. College Station, TX: Stata Press.

## Also see

[\[M-0\] Intro](#) — Introduction to the Mata manual

[\[D\] putmata](#) — Put Stata variables into Mata and vice versa