

Chapter 7

Installation and copyright

7.1 Installation

There are several different forms in which you might receive Meschach. To provide a shorthand for describing collections of files, the Unix convention of putting alternative letters in [...] will be used. (So, `fred[123]` means the collection `fred1`, `fred2` and `fred3`.) Meschach is available over Internet/AARnet via netlib, or at the anonymous ftp site `thrain.anu.edu.au` in the directory `pub/meschach`. There are five `.shar` files: `meschach[01234].shar` (which contain the library itself), of which `meschach0.shar` contains basic documentation and machine dependent files for a number of machines. Of the `meschach[1234].shar` files, only `meschach[12].shar` are needed for the basic Meschach library; the third `.shar` file contains the sparse matrix routines, and the the fourth contains the routines for complex numbers, vectors and matrices. There is also this `README` file that you should get directly, or extract it from `meschach0.shar`.

If you need the old iterative routines, the file `oldmeschach.shar` contains the files `conjgrad.c`, `arnoldi.c` and `lanczos.c`.

To get the library from netlib,

```
mail netlib@research.att.com
send all from c/meschach
```

There are a number of other netlib sites which mirror the main netlib sites. These include `netlib@ornl.gov` (Oak Ridge, TN, USA), `netlib@nac.no` (Oslo, Norway), `ftp.cs.uow.edu.au` (Wollongong, Australia; ftp only), `netlib@nchc.edu.tw` (Taiwan), `elib.zib-berlin.de` (Berlin, Germany; ftp only). (For anonymous ftp sites the directory containing the Meschach `.shar` files is `pub/netlib/c/meschach` or similar, possibly depending on the site.)

Meschach is available in other forms on `thrain.anu.edu.au` by ftp in the directory `pub/meschach`. It is available as a `.tar` file (`mesch12a.tar` for version 1.2a), or as a collection of `.shar` files, or as a `.zip` file. The `.tar` and `.zip` versions each contain the entire contents of the Meschach library.