

## MUESLI includes third-party subprograms or libraries:

### For the FML part:

#### src/fml\_sparse/util

name: A basic tool-kit for sparse matrix computations.  
library name: **SPARSKIT2** (parts only)  
version: 2 (modified by É. Canot)  
author: [Yousef Saad <saad@cs.umn.edu>](mailto:Yousef.Saad@cs.umn.edu)  
URL: <http://www-users.cs.umn.edu/~saad/software/SPARSKIT/index.html>  
license: *GNU LGPL*  
see also: src/fml\_sparse/util/README

#### src/misc/ACM/680

name: Complex error function.  
library name: **ALGORITHM 680**, COLLECTED ALGORITHMS FROM ACM (ACM TOMS 16 (1990) 47).  
authors: G.P.M. Poppe; C.M.J. Wijers.  
URL: <http://calgo.acm.org/>  
license: *ACM Software License Agreement*  
see also: src/misc/ACM/680/README

#### src/misc/ACM/782

name: Computing Rank-Revealing QR Factorizations of Dense Matrices.  
library name: **ALGORITHM 782**, COLLECTED ALGORITHMS FROM ACM (ACM TOMS 24,2 (Jun 1998) 254).  
authors: Christian H. Bischof; Gregorio Quintana-Orti.  
URL: <http://calgo.acm.org/>  
license: *ACM Software License Agreement*  
see also: src/misc/ACM/680/README

#### src/misc/arpack

name: Arnoldi Package: collection of Fortran77 subroutines designed to solve large scale eigenvalue problems.  
library name: **ARPACK-NG**  
version: 3.5.0  
authors: [Danny Sorensen <sorensen@caam.rice.edu>](mailto:Danny.Sorensen@caam.rice.edu) ;  
[Richard Lehoucq <rblehou@sandia.gov>](mailto:Richard.Lehoucq@sandia.gov) ;  
[Chao Yang <cyang@lbl.gov>](mailto:Chao.Yang@lbl.gov) ;  
[Kristi Maschhoff <kristyn@tera.com>](mailto:Kristi.Maschhoff@tera.com) ;  
[Sylvestre Ledru <sylvestre@debian.org>](mailto:Sylvestre.Ledru@debian.org) ;  
Allan Cornet.  
URL: <https://github.com/opencollab/arpack-ng>  
license: *BSD Software License*  
see also: src/misc/arpack/{CHANGES, COPYING, README, VERSION}

#### src/misc/crc32

name: Adler-32  
library name: **(not applicable)**  
author: G. Adam Stanislav (from Mark Adler algorithm, 1995)  
URL: <http://en.wikipedia.org/wiki/Adler-32>  
license: *Creative Commons Attribution-ShareAlike License (Wikipedia)*  
see also: src/misc/crc32/crc32\_adler.README

#### src/misc/GFT

name: Generic Fourier Transform  
library name: **GFT**  
author: [Jalel Chergui <Jalel.Chergui@idris.fr>](mailto:Jalel.Chergui@idris.fr)  
URL: <http://www.idris.fr/data/publications/GFT>  
license: *GNU GPL*  
see also: src/misc/GFT/README

#### src/misc/iso\_varying\_string

name: ISO Varying String Fortran 90 module  
library name: **iso\_varying\_string**  
author: [Rich Townsend <rhdt@star.ucl.ac.uk>](mailto:Rich.Townsend@star.ucl.ac.uk)  
URL: [http://www.fortran.com/iso\\_varying\\_string.f95](http://www.fortran.com/iso_varying_string.f95)  
license: *GNU LGPL*  
see also: src/misc/iso\_varying\_string/README

#### src/misc/minpack

name: Minimization package  
library name: **minpack**  
authors: B. S. Garbow; K. E. Hillstom; J. J. Moré.  
URL: <http://www.netlib.org/minpack>  
license: *public domain*  
see also: src/misc/minpack/README

#### src/misc/slatec

name: SLATEC Common Mathematical Library (actually a subpart)  
library name: **SLATEC**  
version: 4.1  
authors: US Government research laboratories  
URL: <http://www.netlib.org/slatec/>  
license: *public domain*  
see also: src/misc/slatec/{aaaaaa.f, README}

#### src/misc/suitesparse

name: Collection of software packages for Sparse Matrices.  
library name: **SuiteSparse**  
version: 4.5.5  
author: [Tim Davis <davis@cise.ufl.edu>](mailto:Tim.Davis@cise.ufl.edu)  
URL: <http://faculty.cse.tamu.edu/davis/suitesparse.html>  
license: *GNU LGPL* or *GNU GPL* (depending of the package)  
see also: src/misc/suitesparse/{versions, README}

#### src/misc/suitesparse/METIS

name: Serial Graph Partitioning and Fill-reducing Matrix Ordering  
library name: **METIS**  
version: 5.1.0  
authors: [George Karypis and Vipin Kumar <metis@cs.umn.edu>](mailto:George.Karypis@cs.umn.edu)  
URL: <http://glaros.dtc.umn.edu/gkhome/metis/metis/overview>  
license: see src/misc/suitesparse/METIS/LICENSE.txt  
see also: src/misc/suitesparse/METIS/README.txt

#### src/misc/delaunay/2d

name: A Two-Dimensional Quality Mesh Generator and Delaunay Triangulator.  
library name: **Triangle**  
version: 1.6  
author: [Jonathan Richard Shewchuk <jrs@cs.berkeley.edu>](mailto:jrs@cs.berkeley.edu)  
URL: <http://www.cs.cmu.edu/~quake/triangle.html>  
license: see src/misc/delaunay/2d/License.txt  
see also: src/misc/delaunay/2d/README

#### src/misc/delaunay/3d

name: 3D Delaunay triangulation.  
library name: **del-tree3**  
version: juillet 1996  
author: [Olivier Devillers <Olivier.Devillers@sophia.inria.fr>](mailto:Olivier.Devillers@sophia.inria.fr)  
FTP: <ftp://ftp-sop.inria.fr/prisme/del-tree/dimension3.tar.gz>  
URL: <http://www-sop.inria.fr/prisme/logiciel/del-tree/index.html.fr>  
license: free of charge for non commercial use  
see also: src/misc/delaunay/3d/README

#### src/misc/RngStreams

name: Multiple independent streams of pseudo-random numbers.  
library name: **RngStreams**  
version: 1.0.1  
authors: [Pierre L'Ecuyer and Richard Simard <lecuyer@iro.UMontreal.ca>](mailto:lecuyer@iro.UMontreal.ca)  
URL: <http://www.iro.umontreal.ca/~simardr/indexe.html>  
license: *GNU GPL*  
see also: src/misc/RngStreams/README

#### src/misc/randlib

name: Random Number Generation  
library name: **Randlib (one routine only: ignpoi)**  
authors: Barry W. Brown  
URL: <https://biostatistics.mdanderson.org/SoftwareDownload/SingleSoftware/Index/27>  
license: *Public domain*

### For the FGL part:

#### src/fgl/mfplot

name: Tim Pearson Graphics Subroutine Library  
library name: **PGPLOT**  
version: 5.2.2  
author: [Tim Pearson <tjp@astro.caltech.edu>](mailto:tjp@astro.caltech.edu)  
URL: <http://www.astro.caltech.edu/~tjp/pgplot/>  
license: see src/fgl/mfplot/PGPLOT\_License.txt  
see also: src/fgl/mfplot/README  
note: *This package has been so modified that today we could consider it as an own MUESLI part.*

#### src/fgl/mfplot/grfont

name: Hershey fonts  
library name: **(not applicable)**  
version: (not applicable)  
author: James Hurt  
address: Cognition, Inc.; 900 Technology Park Drive; Billerica, MA 01821; USA  
license: see src/fgl/mfplot/grfont/Hershey-fonts-license.txt

src/fgl/mfplot/src/sys

name: Deflate  
library name: **BMEPS**  
version: (dated 2000, but BMEPS has been changed for BMPP somewhere in 2018)  
author: Dirk Krause, Schmalkalden / Germany  
URL: <http://dktools.sourceforge.net/bmpp.html>  
license: *GNU LGPL*

src/fgl/mfplot/fontconfig

name: Adobe Font Metrics  
library name: **(not applicable)**  
version: 2.0 and 4.1  
URL: <http://partners.adobe.com/public/developer/font/index.html>  
license: see src/fgl/mfplot/fontconfig/Adobe-License.txt

src/fgl/mfplot/src/xft\_EC

name: X FreeType library  
library name: **libXft**  
version: 2.3.2  
URL: <https://gitlab.freedesktop.org/xorg/lib/libXft/>  
license: see src/fgl/mfplot/src/xft\_EC/COPYING  
note: *This library has been modified to take into account inclined strings.*

src/fgl/mfplot/src/TriStream

name: TriStream – Trace streamlines on a triangular mesh using nodal velocities  
library name: **(not applicable – Matlab script)**  
version: (not applicable)  
URL: <https://fr.mathworks.com/matlabcentral/fileexchange/11278-tristream>  
license: no license known. See src/fgl/mfplot/src/TriStream/README  
note: *The original Matlab script has been improved (better reliability) and translated using Muesli routines.*

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<http://www.dreamstime.com/free-photos>

Credits have been inserted at the bottom of the third page of each PDF.

They have been officially downloaded by É. Canot on Mon, 13th of Feb., 2012.

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