

## 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:sorensen@caam.rice.edu) ;  
[Richard Lehoucq <rblehou@sandia.gov>](mailto:rblehou@sandia.gov) ;  
[Chao Yang <cyang@lbl.gov>](mailto:cyang@lbl.gov) ;  
[Kristi Maschhoff <kristyn@tera.com>](mailto:kristyn@tera.com) ;  
[Sylvestre Ledru <sylvestre@debian.org>](mailto:sylvestre@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:rhdt@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: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:metis@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: **tetgen**  
version: 1.5.1  
author: Hang Si  
URL: <http://www.tetgen.org>  
license: *GNU AFFERO GPL*  
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)**  
author: Barry W. Brown  
URL: <https://biostatistics.mdanderson.org/SoftwareDownload/SingleSoftware/Index/27>  
license: *Public domain*

#### src/misc/voronoi/2d

name: 2D Voronoi diagram  
library name: **JC\_VORONOI (header only: jc\_voronoi.h)**  
version: 0.9.0  
author: Matthias Westerdahl  
URL: <https://github.com/JCash/voronoi>  
license: *MIT*

### 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.*

---

MUESLI also uses copyrighted photos in its documentation; they come from the web site:  
<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.

The license type for using these four photos can be found inside the document:  
docs/RF-LL\_License.txt