

# Chapter 1

## Copyright

oomph-lib is "open source" software and may therefore be freely downloaded and distributed – the full details are given below. To facilitate the installation of the library, the oomph-lib distribution includes (parts of) certain other open source libraries (SuperLU, METIS and BLAS). Redistribution of these libraries with oomph-lib has been approved by their authors – we suggest you get in touch with them if you wish to re-distribute their libraries yet again.

---

### oomph-lib's licencing terms

This library is free software; you can redistribute it and/or modify it under the terms of the [GNU Lesser General Public License](#) as published by the [Free Software Foundation](#); either version 2.1 of the License, or (at your option) any later version. This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the [GNU Lesser General Public License](#) for more details.

Your use or distribution of oomph-lib or any derivative code implies that you agree to this License.

Copyright (C) 2006-2021 by [Matthias Heil](#) and [Andrew L. Hazel](#).

---

### Licencing details for SuperLU

The oomph-lib distribution includes the double precision versions of the sparse direct linear solver SuperLU (version 3.0 of the serial version and version 2.0 of the distributed memory parallel version). Full details of the [SuperLU](#) licence may be found at

<http://crd.lbl.gov/~xiaoye/SuperLU>

---

### Licencing details for METIS

The oomph-lib distribution includes version 4.0 of George Karypis' [METIS](#) mesh partitioning library. Full details of the [METIS](#) licence may be found at

<http://www-users.cs.umn.edu/~karypis/metis/>

---

### Licencing details for BLAS/LAPACK

The oomph-lib distribution includes the entire BLAS library and a few functions from LAPACK. Full licencing details for the [BLAS library](#) may be found at

<http://www.netlib.org/blas/>

Full licencing details for the [LIBRARY library](#) may be found at

<http://www.netlib.org/lapack/>

---

### Licencing details for GMP

The `oomph-lib` distribution includes version 6.1.2 of the GNU Multiple Precision Arithmetic Library (GMP), <https://gmplib.org> which is released under the GNU LGPL v3 and GNU GPL v2 licences. Full details of the licence may be found at

<https://gmplib.org>

---

### Licencing details for MPFR

The `oomph-lib` distribution includes version 3.1.6 of the GNU MPFR Library <http://www.mpfr.org/> which is released under the GNU Lesser General Public License (GNU Lesser GPL). Full details of the licence may be found at

<http://www.mpfr.org/>

---

### Licencing details for Boost

The `oomph-lib` distribution includes version 1.65.1 of the Boost Library <http://www.boost.org/> which is released under the Boost Software Licence Version 1.0. Full details of the licence may be found at

<http://www.boost.org/users/license.html>

---

### Licencing details for CGAL

The `oomph-lib` distribution includes version 4.11 of CGAL The Computational Geometry Algorithms Library <https://www.cgal.org/> which is released under the distributed under a dual license scheme, that is under the GPL/ LGPL open source license, as well as under commercial licenses. Full details of the licence may be found at

<https://doc.cgal.org/latest/Manual/preliminaries.html#licenseIssues>

---

## 1.1 PDF file

A [pdf version](#) of this document is available.