

Advanced: Oriented Development Techniques for Scientific Applications

C++

- **Modern C++ Design: Generic Programming and Design Patterns Applied, Andrei Alexandrescu**
>>[Amazon.com: Books: Modern C++ Design: Generic Programming and Design Patterns Applied](#)
- **Expression Templates, Todd Veldhuizen**
>>[Expression Templates \(Todd Veldhuizen\)](#)
- **Template Metaprograms, Todd Veldhuizen**
>>[Template Metaprograms \(Todd Veldhuizen\)](#)
- **The View Template Library, Martin Weiser & Gary Powell**
>>[The View Template Library](#)
- **Custom Iterators for the STL, Christopher Baus & Thomas Becker**
>>[Custom Iterators](#)
- **Policy Adaptors and The Boost Iterator Adaptor Library, David Abrahams & Jeremy Siek**

SCIENTIFIC PROGRAMMING

- **Generic Components for Grid Data Structures and Algorithms with C++, Guntram Berti**
>><http://www.math.tu-cottbus.de/INSTITUT/Isnwmwr/papers/tmpw00.pdf>
- **A Generic Toolbox for The Grid Craftsman, Guntram Berti**
>><http://www.math.tu-cottbus.de/INSTITUT/Isnwmwr/papers/leipzig01.pdf>
- **Generic Software Components for Scientific Computing, Ph.D. Dissertation, Guntram Berti**
>>[Generic Software Components for Scientific Computing \[Guntram Berti, Dissertation\]](#)
- **Will C++ be faster than Fortran?, Todd Veldhuizen**
>>[Will C++ be faster than Fortran?](#)
- **Scientific Computing: C++ versus Fortran, Todd Veldhuizen**
>>[Scientific Computing: C++ versus Fortran](#)

LIBRARIES

- **C++ Boost**
>>[Boost C++ Libraries](#)
- **Pooma - Parallel Object-Oriented Methods and Applications**
>>[POOMA](#)
- **The Matrix Template Library - Generic Components for High Performance Scientific Computing**
>>[The Matrix Template Library](#)
- **Blitz++ - Object Oriented Scientific Computing**
>>[Blitz++ Home Page](#)
- **View Template Library**
>>[VTL \(View Template Library\) Homepage](#)
- **PETE - Portable Expression Template Engine**
>>[Portable Expression Template Engine | Main](#)