1. Introduction

Pieter P

1.1. Goals and non-goals

The goal of this guide is to get to an ergonomic workflow for developing scientific software using C^{++} . It is not designed to be a tutorial of the C^{++} language itself, but an overview of useful tools (package managers, build systems, linters, static analysis, runtime sanitizers, debuggers, testing frameworks), recommendations on how to structure a (scientific) C^{++} project, guidelines for interoperability with other popular languages, and so on.

1.2. Related resources

- <u>cppreference</u>: the recommended language and standard library reference
- <u>learncpp.com</u>: a solid, up-to-date tutorial for the C++ language itself
- <u>C++ Core Guidelines</u>: an extensive set of guidelines for using C++ well
- <u>C++ 23 Standard (draft)</u>: draft of the official C++ standard, as a big PDF