
# SU2 User Manual
# Linear Solvers
June 14, 2015

# Chapter 1

# First chapter

## 1.1 About SU2

The SU2 suite is an open-source collection of C++ based software tools for performing Partial Differential Equation (PDE) analysis and solving PDE constrained optimization problems. The toolset is designed with computational fluid dynamics and aerodynamic shape optimization in mind, but is extensible to treat arbitrary sets of governing equations such as potential flow, electrodynamics, chemically reacting flows, and many others. SU2 is under active development in the Aerospace Design Lab (ADL) of the Department of Aeronautics and Astronautics at Stanford University, and is released under an open-source license.

This volume of the SU2 Users Manual provides documentation of the available linear-system solvers in SU2.

Analyze. Optimize. Design!

# Chapter 2

# Linear Solvers

## 2.1 Linear Solver Command Structure

LINEAR_SOLVER = <string> CG | FGMRES | BCGSTAB | SMOOTHER_JACOBI

LINEAR_SOLVER_PREC = <string> ILU0 | LU_SGS | LINELET | JACOBI

LINEAR_SOLVER_ERROR = <real>

LINEAR_SOLVER_ITER = <integer>