

# **Cgmp: A Multi-Physics Multi-Domain Solver**

## Reference Manual

Kyle K. Chand  
William D. Henshaw  
Centre for Applied Scientific Computing  
Lawrence Livermore National Laboratory  
Livermore, CA, 94551.  
henshaw@llnl.gov  
<http://www.llnl.gov/casc/Overture>

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### **Abstract:**

This document describes **Cgmp**, a solver written using the **Overture** framework to solve multi-physics multi-domain problems. The solver can be used, for example, to solve thermal hydraulics problems where fluid flow in one domain is coupled to heat transfer in another *solid* domain.

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# 1 Introduction

This document is currently under development.

Cgmp solves problems on overlapping grids and is built upon the **Overture** framework [?],[?],[?].

## **2 Developers Guide to How Cgmp solves the interface equations**

The multi domain time stepping function is

## References