## University of Colorado at Boulder Department of Applied Mathematics

## Comprehensive Examination

Tuesday, April 30, 2013 11:00-12:00 p.m. Grandview Conference Room at 1320 Grandview Ave

## Presenter

Christopher Leibs

## Title

Multigrid Preconditioning Methods for an Implicit Jacobian-Free Newton-Krylov Two-Fluid Kinetic Plasma Solver

Plasma is a state of matter in which a collection of atoms have dissociated into their constituent ions and electrons. The availability of this free charge allows the plasma to interact with electromagnetic elds. The elds