Integrated Science Thesis Proposal

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1 Introduction

1.1 Magnetically Confined Fusion

1.1.1 Motivation for Studying Plasma Fusion

The motivation for this master's thesis is to computationally narrow down the parameter space of a plasma that is confined in a magnetic field within a fusion reactor. The complete physical laws governing the behavior of magnetically confined fusion are quite complex, and in totality are beyond the scope of a thesis proposal. As such, a bird's eye view of the current research being performed in the field of plasma physics will be presented. [**?**] This will be followed by a an overview of the diffusion model that will be explored in this paper.

1.1.2 Magnetically Confined Plasma as an Energy Source

1.1.3 Physics of Magnetically Confined Fusion

1.1.4 Transport Phenomena in Fusion

References