



UNIVERSITY OF VIRGINIA



DUKE UNIVERSITY

HiFROST MANUAL

The $\text{HI}\gamma\text{S}$ Frozen Spin Target

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January 21, 2014

Preface

HiFrost is nuclear polarized target apparatus consisting of a dilution refrigerator, internal “holding” magnetic coil, microwave guide and NMR coil. External components of HiFrost include a polarizing magnet, microwave generating EIO, pump and vacuum system to run the dilution refrigerator, and the Q-Meter/Yale Card set up for running the NMR.

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Chapter 1

Fridge Tools

1.1 tools

tools!

1.1.1 small tools

screw drivers

1.1.2 big tools

da fridge

Chapter 2

Alternative Rings

2.1 Definitions

2.2 The Cayley Numbers

2.3 Zorn's Vector Matrix Algebra

