## Introduction

The Ptolemy Kernel Manual describes the C++ classes that make up the core of Ptolemy. It is assumed that the reader is intimately familiar with the Ptolemy system (If you are not, see http://ptolemy.eecs.berkeley.edu). The Kernel Manual was originally written by Joe Buck, Soonhoi Ha added the Code Generation chapters. The last version of the Kernel Manual was released with Ptolemy 0.5.2. With the release of Ptolemy 0.7, we decided that it was time to update the Kernel Manual to include things like Tom Lane's changes to the type checking system ("The PortHole type resolution algorithm" on page 6-15). However, much of the Kernel Manual is still out of date, the most common errors are changes in the calling signature of methods, or the addition or removal of methods. Ultimately, the source code is the best reference for these sorts of issues. We decided to release the Kernel Manual in an unpolished form because the usefulness of some of the sections far outweighs the bugs in other sections.