## 1 Introduction

This document describes the way that the Indexer module should work. This will take one or more diffraction images, and optionally some metadata, and compute the unit cell, likely lattice and orientation. There are issues associated with this:

- When indexing multiple data sets, the indexing has to be consistent.
- Indexing should be reliable.
- The reference frame varies from program to program.

All of these factors should be taken into account. This has now, to some extent, been rendered obsolete by the stuff in Schema/Interfaces, though the IndexerFactory in here will generate things which correspond to the Indexer interface and are available on the existing system.