Overview of Techniques
for Various Aspects of the
C. elegans Modeling Project

David Dalrymple

compiled 20:34, Friday 1st October, 2010

Introduction

1 Observation

1.1 Sensor Molecules

1.2 Optics

2 Analysis

2.1 Straightening

2.2 Separation

3 Stimulation

3.1 Rhodopsins

3.2 Optics

4 Modeling

4.1 Correlation Matrix

4.2 Kernel Methods

4.3 Control Theory

5 Verification

5.1 Quantifying Behavior

5.2 Biophysical Simulation