Thesis Outline

Introduction and Theory

-The Heart Electrophysiology (2)

-Cardiac Arrhythmia and Atrial Fibrillation (2)

-Current models and Research (3)

Christensen et al model

-Theory (2)

-Critical structures (2)

-Markov Chain Analysis(2)

- Our Implementation(4)

- Changing the refractory Period Extension(4)

-Spherical Model

- Motivations (1)

- Implementation of the model (2)

-parameters of the model (1)

-results (8)