Thesis Outline

Introduction and Theory

-The Heart Electrophysiology (2)

(pictures: picture heart, picture fibers, picture impulse)

-Cardiac Arrhythmia and Atrial Fibrillation (2)

(pictures: maybe types of arrhythmia and AF

-Current models and Research (3)

Christensen et al model

-Theory (2)

-Critical structures (2)

(picture: critical structure)

-Markov Chain Analysis(2)

- Our Implementation(4)

(picture:

- Changing the refractory Period Extension(4)

(picture model used)

-Spherical Model

- Motivations (1)

- Implementation of the model (2)

-parameters of the model (1)

-results (8)