FLORIDA STATE UNIVERSITY

COLLEGE OF ARTS AND SCIENCES

TOPOLOGICAL DATA ANALYSIS FOR MEDICAL IMAGING AND RNA DATA ANALYSIS ON

TREE SPACES

By

CHEN SHEN

A Dissertation submitted to the
Department of Statistics
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

2021

Chen Shen defended this dissertation on March 10, 2021.
The members of the supervisory committee were:

Victor Patrangenaru

Professor Directing Dissertation

Xiuwen Liu

University Representative

Jonathan Bradley

Committee Member

Chao Huang

Committee Member

The Graduate School has verified and approved the above-named committee members, and certifies that the dissertation has been approved in accordance with university requirements.