## UNIVERSITY OF SOUTH FLORIDA

## Defense of a Master's Thesis

A Comparative Study of Formal Verification Techniques for Authentication Protocols

> by Hernan M. Palombo

For the MSCS degree in Computer Science & Engineering

This thesis presents a comparative study of formal verification tools for security protocols for their respective strengths and weaknesses supported by the results from several case studies. Models of well-known security protocols are formalized and verified using explicit model checking (SPIN), symbolic analysis (Proverif), and theorem proving (Coq).

> October 2<sup>nd</sup>, 2015 10:00 am ENB 313

## THE PUBLIC IS INVITED

Examining Committee

Dr. Hao Zheng, Ph.D., Co-Major Professor Dr. Jarred Ligatti, Ph.D., Co-Major Professor Dr. Yao Liu, Ph.D.

Robert Bishop, Ph.D. Dean, College of Engineering Dwayne Smith, Ph.D. Dean, Office of Graduate Studies

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