HARVARD UNIVERSITY Graduate School of Arts and Sciences



DISSERTATION ACCEPTANCE CERTIFICATE

The undersigned, appointed by the

Department of Astronomy

have examined a dissertation entitled

From Design to Detection: Joint Gravitational Wave and Electromagnetic Astronomy

presented by Philip Steven Cowperthwaite

candidate for the degree of Doctor of Philosophy, and hereby

certify that it is worthy of acceptance.

Signature Jon Ahan Grmiller
Typed name: Prof. Jonathan E. Grindlay, Chair
Signature Signature
Typed name: Prof. Edo Berger
Signature Daniel Exerce
Typed name: Prof. Daniel J. Eisenstein
Signature B
Typed name: Prof. Brian D. Metzger

Date: April 20, 2018