

HARVARD UNIVERSITY
Graduate School of Arts and Sciences



DISSERTATION ACCEPTANCE CERTIFICATE

The undersigned, appointed by the

Department of Astronomy

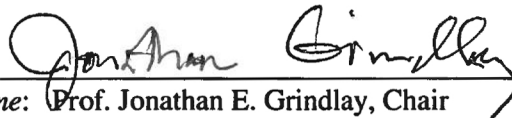
have examined a dissertation entitled

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 
Typed name: Prof. Jonathan E. Grindlay, Chair

Signature 
Typed name: Prof. Edo Berger

Signature 
Typed name: Prof. Daniel J. Eisenstein

Signature 
Typed name: Prof. Brian D. Metzger

Date: April 20, 2018