1 Title

Matthew Mould 61, 2, 3, * and friends

¹LIGO Laboratory, Massachusetts Institute of Technology, Cambridge, MA 02139, USA

²Kavli Institute for Astrophysics and Space Research, Massachusetts Institute of Technology, Cambridge, MA 02139, USA

³Department of Physics, Massachusetts Institute of Technology, Cambridge, MA 02139, USA

(Dated: May 12, 2025)

This is the abstract.

I. INTRODUCTION

This is the introduction.

ACKNOWLEDGMENTS

We thank friends for discussions. M.M. is supported by the LIGO Laboratory through the National Science Foundation awards PHY-1764464 and PHY-2309200.

The authors are grateful for computational resources provided by the LIGO Laboratory supported by National Science Foundation Grants PHY-0757058 and PHY-16 0823459, and by subMIT at MIT Physics. This material is based upon work supported by NSF's LIGO Laboratory which is a major facility fully funded by the National Science Foundation and has made use of data or software obtained from the Gravitational Wave Open Science Center (gwosc.org), a service of the LIGO Scientific Collaboration, the Virgo Collaboration, and KAGRA.

^{*} mmould@mit.edu