

ERRATUM: “SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM FIFTEEN SUPERNOVA
REMNANTS AND FOMALHAUT B WITH ADVANCED LIGO” (2019, APJ, 875, 122)

B. P. ABBOTT,¹ R. ABBOTT,¹ T. D. ABBOTT,² S. ABRAHAM,³ F. ACERNESE,^{4,5} K. ACKLEY,⁶ C. ADAMS,⁷
R. X. ADHIKARI,¹ V. B. ADYA,^{8,9} C. AFFELDT,^{8,9} M. AGATHOS,¹⁰ K. AGATSUMA,¹¹ N. AGGARWAL,¹² O. D. AGUIAR,¹³
L. AIELLO,^{14,15} A. AIN,³ P. AJITH,¹⁶ G. ALLEN,¹⁷ A. ALLOCCA,^{18,19} M. A. ALOY,²⁰ P. A. ALTIN,²¹ A. AMATO,²²
A. ANANYEVA,¹ S. B. ANDERSON,¹ W. G. ANDERSON,²³ S. V. ANGELOVA,²⁴ S. ANTIER,²⁵ S. APPERT,¹ K. ARAI,¹
M. C. ARAYA,¹ J. S. AREEDA,²⁶ M. ARÈNE,²⁷ N. ARNAUD,^{25,28} K. G. ARUN,²⁹ S. ASCENZI,^{30,31} G. ASHTON,⁶
S. M. ASTON,⁷ P. ASTONE,³² F. AUBIN,³³ P. AUFMUTH,⁹ K. AULTONEAL,³⁴ C. AUSTIN,² V. AVENDANO,³⁵
A. AVILA-ALVAREZ,²⁶ S. BABAK,^{36,27} P. BACON,²⁷ F. BADARACCO,^{14,15} M. K. M. BADER,³⁷ S. BAE,³⁸ P. T. BAKER,³⁹
F. BALDACCINI,^{40,41} G. BALLARDIN,²⁸ S. W. BALLMER,⁴² S. BANAGIRI,⁴³ J. C. BARAYOGA,¹ S. E. BARCLAY,⁴⁴
B. C. BARISH,¹ D. BARKER,⁴⁵ K. BARKETT,⁴⁶ S. BARNUM,¹² F. BARONE,^{4,5} B. BARR,⁴⁴ L. BARSOTTI,¹² M. BARSUGLIA,²⁷
D. BARTA,⁴⁷ J. BARTLETT,⁴⁵ I. BARTOS,⁴⁸ R. BASSIRI,⁴⁹ A. BASTI,^{18,19} M. BAWAJ,^{50,41} J. C. BAYLEY,⁴⁴ M. BAZZAN,^{51,52}
B. BÉCSY,⁵³ M. BEJGER,^{27,54} I. BELAHCENE,²⁵ A. S. BELL,⁴⁴ D. BENIWAL,⁵⁵ B. K. BERGER,⁴⁹ G. BERGMANN,^{8,9}
S. BERNUZZI,^{56,57} J. J. BERO,⁵⁸ C. P. L. BERRY,⁵⁹ D. BERSANETTI,⁶⁰ A. BERTOLINI,³⁷ J. BETZWIESER,⁷ R. BHANDARE,⁶¹
J. BIDLER,²⁶ I. A. BILENKO,⁶² S. A. BILGILI,³⁹ G. BILLINGSLEY,¹ J. BIRCH,⁷ R. BIRNEY,²⁴ O. BIRNHOLTZ,⁵⁸ S. BISCANS,^{1,12}
S. BISCOVEANU,⁶ A. BISHT,⁹ M. BITOSI,^{28,19} M. A. BIZOUARD,²⁵ J. K. BLACKBURN,¹ C. D. BLAIR,⁷ D. G. BLAIR,⁶³
R. M. BLAIR,⁴⁵ S. BLOEMEN,⁶⁴ N. BODE,^{8,9} M. BOER,⁶⁵ Y. BOETZEL,⁶⁶ G. BOGAERT,⁶⁵ F. BONDU,⁶⁷ E. BONILLA,⁴⁹
R. BONNAND,³³ P. BOOKER,^{8,9} B. A. BOOM,³⁷ C. D. BOOTH,⁶⁸ R. BORK,¹ V. BOSCHI,²⁸ S. BOSE,^{69,3} K. BOSSIE,⁷
V. BOSSILKOV,⁶³ J. BOSVELD,⁶³ Y. BOUFFANAIS,²⁷ A. BOZZI,²⁸ C. BRADASCHIA,¹⁹ P. R. BRADY,²³ A. BRAMLEY,⁷
M. BRANCHESI,^{14,15} J. E. BRAU,⁷⁰ T. BRIANT,⁷¹ J. H. BRIGGS,⁴⁴ F. BRIGHENTI,^{72,73} A. BRILLET,⁶⁵ M. BRINKMANN,^{8,9}
V. BRISSON,²⁵ * P. BROCKILL,²³ A. F. BROOKS,¹ D. D. BROWN,⁵⁵ S. BRUNETT,¹ A. BUIKEMA,¹² T. BULIK,⁷⁴
H. J. BULTEN,^{75,37} A. BUONANNO,^{36,76} D. BUSKULIC,³³ C. BUY,²⁷ R. L. BYER,⁴⁹ M. CABERO,^{8,9} L. CADONATI,⁷⁷
G. CAGNOLI,^{22,78} C. CAHILLANE,¹ J. CALDERÓN BUSTILLO,⁶ T. A. CALLISTER,¹ E. CALLONI,^{79,5} J. B. CAMP,⁸⁰
W. A. CAMPBELL,⁶ K. C. CANNON,⁸¹ H. CAO,⁵⁵ J. CAO,⁸² E. CAPOCASA,²⁷ F. CARBOGNANI,²⁸ S. CARIDE,⁸³
M. F. CARNEY,⁵⁹ G. CARULLO,¹⁸ J. CASANUEVA DIAZ,¹⁹ C. CASENTINI,^{30,31} S. CAUDILL,³⁷ M. CAVAGLIÀ,⁸⁴ F. CAVALIER,²⁵
R. CAVALIERI,²⁸ G. CELLA,¹⁹ P. CERDÁ-DURÁN,²⁰ G. CERRETANI,^{18,19} E. CESARINI,^{85,31} O. CHAIBI,⁶⁵ K. CHAKRAVARTI,³
S. J. CHAMBERLIN,⁸⁶ M. CHAN,⁴⁴ S. CHAO,⁸⁷ P. CHARLTON,⁸⁸ E. A. CHASE,⁵⁹ E. CHASSANDE-MOTTIN,²⁷
D. CHATTERJEE,²³ M. CHATURVEDI,⁶¹ B. D. CHEESEBORO,³⁹ H. Y. CHEN,⁸⁹ X. CHEN,⁶³ Y. CHEN,⁴⁶ H.-P. CHENG,⁴⁸
C. K. CHEONG,⁹⁰ H. Y. CHIA,⁴⁸ A. CHINCARINI,⁶⁰ A. CHIUMMO,²⁸ G. CHO,⁹¹ H. S. CHO,⁹² M. CHO,⁷⁶
N. CHRISTENSEN,^{65,93} Q. CHU,⁶³ S. CHUA,⁷¹ K. W. CHUNG,⁹⁰ S. CHUNG,⁶³ G. CIANI,^{51,52} A. A. CIOBANU,⁵⁵ R. CIOLFI,^{94,95}
F. CIPRIANO,⁶⁵ A. CIRONE,^{96,60} F. CLARA,⁴⁵ J. A. CLARK,⁷⁷ P. CLEARWATER,⁹⁷ F. CLEVA,⁶⁵ C. COCCHIERI,⁸⁴
E. COCCIA,^{14,15} P.-F. COHADON,⁷¹ D. COHEN,²⁵ R. COLGAN,⁹⁸ M. COLLEONI,⁹⁹ C. G. COLLETTE,¹⁰⁰ C. COLLINS,¹¹
L. R. COMINSKY,¹⁰¹ M. CONSTANCIO JR.,¹³ L. CONTI,⁵² S. J. COOPER,¹¹ P. CORBAN,⁷ T. R. CORBITT,²
I. CORDERO-CARRIÓN,¹⁰² K. R. CORLEY,⁹⁸ N. CORNISH,⁵³ A. CORSI,⁸³ S. CORTESE,²⁸ C. A. COSTA,¹³ R. COTESTA,³⁶
M. W. COUGHLIN,¹ S. B. COUGHLIN,^{68,59} J.-P. COULON,⁶⁵ S. T. COUNTRYMAN,⁹⁸ P. COUVARES,¹ P. B. COVAS,⁹⁹
E. E. COWAN,⁷⁷ D. M. COWARD,⁶³ M. J. COWART,⁷ D. C. COYNE,¹ R. COYNE,¹⁰³ J. D. E. CREIGHTON,²³
T. D. CREIGHTON,¹⁰⁴ J. CRIPE,² M. CROQUETTE,⁷¹ S. G. CROWDER,¹⁰⁵ T. J. CULLEN,² A. CUMMING,⁴⁴ L. CUNNINGHAM,⁴⁴
E. CUOCO,²⁸ T. DAL CANTON,⁸⁰ G. DÁLYA,¹⁰⁶ S. L. DANILISHIN,^{8,9} S. D'ANTONIO,³¹ K. DANZMANN,^{9,8} A. DASGUPTA,¹⁰⁷
C. F. DA SILVA COSTA,⁴⁸ L. E. H. DATRIER,⁴⁴ V. DATILO,²⁸ I. DAVE,⁶¹ M. DAVIER,²⁵ D. DAVIS,⁴² E. J. DAW,¹⁰⁸
D. DEBRA,⁴⁹ M. DEENADAYALAN,³ J. DEGALLAIX,²² M. DE LAURENTIS,^{79,5} S. DELÉGLISE,⁷¹ W. DEL POZZO,^{18,19}
L. M. DEMARCHI,⁵⁹ N. DEMOS,¹² T. DENT,^{8,9} M. DENYS,⁷⁴ R. DE PIETRI,^{109,57} J. DERBY,²⁶ R. DE ROSA,^{79,5}
C. DE ROSSI,^{22,28} R. DESALVO,¹¹⁰ O. DE VARONA,^{8,9} S. DHURANDHAR,³ M. C. DÍAZ,¹⁰⁴ T. DIETRICH,³⁷ L. DI FIORE,⁵
M. DI GIOVANNI,^{111,95} T. DI GIROLAMO,^{79,5} A. DI LIETO,^{18,19} B. DING,¹⁰⁰ S. DI PACE,^{112,32} I. DI PALMA,^{112,32}
F. DI RENZO,^{18,19} A. DMITRIEV,¹¹ Z. DOCTOR,⁸⁹ F. DONOVAN,¹² K. L. DOOLEY,^{68,84} S. DORAVARI,^{8,9} I. DORRINGTON,⁶⁸
T. P. DOWNES,²³ M. DRAGO,^{14,15} J. C. DRIGGERS,⁴⁵ Z. DU,⁸² J.-G. DUCOIN,²⁵ P. DUPEJ,⁴⁴ S. E. DWYER,⁴⁵
P. J. EASTER,⁶ T. B. EDO,¹⁰⁸ M. C. EDWARDS,⁹³ A. EFFLER,⁷ P. EHRENS,¹ J. EICHHOLZ,¹ S. S. EIKENBERRY,⁴⁸
M. EISENMANN,³³ R. A. EISENSTEIN,¹² R. C. ESSICK,⁸⁹ H. ESTELLES,⁹⁹ D. ESTEVEZ,³³ Z. B. ETIENNE,³⁹ T. ETZEL,¹
M. EVANS,¹² T. M. EVANS,⁷ V. FAFONE,^{30,31,14} H. FAIR,⁴² S. FAIRHURST,⁶⁸ X. FAN,⁸² S. FARINON,⁶⁰ B. FARR,⁷⁰
W. M. FARR,¹¹ E. J. FAUCHON-JONES,⁶⁸ M. FAVATA,³⁵ M. FAYS,¹⁰⁸ M. FAZIO,¹¹³ C. FEE,¹¹⁴ J. FEICHT,¹ M. M. FEJER,⁴⁹
F. FENG,²⁷ A. FERNANDEZ-GALIANA,¹² I. FERRANTE,^{18,19} E. C. FERREIRA,¹³ T. A. FERREIRA,¹³ F. FERRINI,²⁸
F. FIDECARO,^{18,19} I. FIORI,²⁸ D. FIORUCCI,²⁷ M. FISHBACH,⁸⁹ R. P. FISHER,^{42,115} J. M. FISHER,¹² M. FITZ-AXEN,⁴³
R. FLAMINIO,^{33,116} M. FLETCHER,⁴⁴ E. FLYNN,²⁶ H. FONG,¹¹⁷ J. A. FONT,^{20,118} P. W. F. FORSYTH,²¹ J.-D. FOURNIER,⁶⁵
S. FRASCA,^{112,32} F. FRASCONI,¹⁹ Z. FREI,¹⁰⁶ A. FREISE,¹¹ R. FREY,⁷⁰ V. FREY,²⁵ P. FRITSCHER,¹² V. V. FROLOV,⁷

- P. FULDA,⁴⁸ M. FYFFE,⁷ H. A. GABBARD,⁴⁴ B. U. GADRE,³ S. M. GAEBEL,¹¹ J. R. GAIR,¹¹⁹ L. GAMMAITONI,⁴⁰
M. R. GANJA,⁵⁵ S. G. GAONKAR,³ A. GARCIA,²⁶ C. GARCÍA-QUIRÓS,⁹⁹ F. GARUFI,^{79,5} B. GATELEY,⁴⁵ S. GAUDIO,³⁴
G. GAUR,¹²⁰ V. GAYATHRI,¹²¹ G. GEMME,⁶⁰ E. GENIN,²⁸ A. GENNAI,¹⁹ D. GEORGE,¹⁷ J. GEORGE,⁶¹ L. GERGELY,¹²²
V. GERMAIN,³³ S. GHONGE,⁷⁷ ABHIRUP GHOSH,¹⁶ ARCHISMAN GHOSH,³⁷ S. GHOSH,²³ B. GIACOMAZZO,^{111,95}
J. A. GIAIME,^{2,7} K. D. GIARDINA,⁷ A. GIAZZOTTO,^{19,†} K. GILL,³⁴ G. GIORDANO,^{4,5} L. GLOVER,¹¹⁰ P. GODWIN,⁸⁶
E. GOETZ,⁴⁵ R. GOETZ,⁴⁸ B. GONCHAROV,⁶ G. GONZÁLEZ,² J. M. GONZALEZ CASTRO,^{18,19} A. GOPAKUMAR,¹²³
M. L. GORODETSKY,⁶² S. E. GOSSAN,¹ M. GOSELIN,²⁸ R. GOUATY,³³ A. GRADO,^{124,5} C. GRAEF,⁴⁴ M. GRANATA,²²
A. GRANT,⁴⁴ S. GRAS,¹² P. GRASSIA,¹ C. GRAY,⁴⁵ R. GRAY,⁴⁴ G. GRECO,^{72,73} A. C. GREEN,^{11,48} R. GREEN,⁶⁸
E. M. GRETARSSON,³⁴ P. GROOT,⁶⁴ H. GROTE,⁶⁸ S. GRUNEWALD,³⁶ P. GRUNING,²⁵ G. M. GUIDI,^{72,73} H. K. GULATI,¹⁰⁷
Y. GUO,³⁷ A. GUPTA,⁸⁶ M. K. GUPTA,¹⁰⁷ E. K. GUSTAFSON,¹ R. GUSTAFSON,¹²⁵ L. HAEGEL,⁹⁹ O. HALIM,^{15,14}
B. R. HALL,⁶⁹ E. D. HALL,¹² E. Z. HAMILTON,⁶⁸ G. HAMMOND,⁴⁴ M. HANEY,⁶⁶ M. M. HANKE,^{8,9} J. HANKS,⁴⁵ C. HANNA,⁸⁶
O. A. HANNUKSELA,⁹⁰ J. HANSON,⁷ T. HARDWICK,² K. HARIS,¹⁶ J. HARMS,^{14,15} G. M. HARRY,¹²⁶ I. W. HARRY,³⁶
C.-J. HASTER,¹¹⁷ K. HAUGHIAN,⁴⁴ F. J. HAYES,⁴⁴ J. HEALY,⁵⁸ A. HEIDMANN,⁷¹ M. C. HEINTZE,⁷ H. HEITMANN,⁶⁵
P. HELLO,²⁵ G. HEMMING,²⁸ M. HENDRY,⁴⁴ I. S. HENG,⁴⁴ J. HENNIG,^{8,9} A. W. HEPTONSTALL,¹ F. J. HERNANDEZ,⁶
M. HEURS,^{8,9} S. HILD,⁴⁴ T. HINDERER,^{127,37,128} D. HOAK,²⁸ S. HOCHHEIM,^{8,9} D. HOFMAN,²² A. M. HOLGADO,¹⁷
N. A. HOLLAND,²¹ K. HOLT,⁷ D. E. HOLZ,⁸⁹ P. HOPKINS,⁶⁸ C. HORST,²³ J. HOUGH,⁴⁴ E. J. HOWELL,⁶³ C. G. HOY,⁶⁸
A. HREIBI,⁶⁵ E. A. HUERTA,¹⁷ D. HUET,²⁵ B. HUGHEY,³⁴ M. HULKO,¹ S. HUSA,⁹⁹ S. H. HUTTNER,⁴⁴ T. HUYNH-DINH,⁷
B. IDZKOWSKI,⁷⁴ A. IESS,^{30,31} C. INGRAM,⁵⁵ R. INTA,⁸³ G. INTINI,^{112,32} B. IRWIN,¹¹⁴ H. N. ISA,⁴⁴ J.-M. ISAC,⁷¹ M. ISI,¹
B. R. IYER,¹⁶ K. IZUMI,⁴⁵ T. JACQMIN,⁷¹ S. J. JADHAV,¹²⁹ K. JANI,⁷⁷ N. N. JANTHALUR,¹²⁹ P. JARANOWSKI,¹³⁰
A. C. JENKINS,¹³¹ J. JIANG,⁴⁸ D. S. JOHNSON,¹⁷ A. W. JONES,¹¹ D. I. JONES,¹³² R. JONES,⁴⁴ R. J. G. JONKER,³⁷ L. JU,⁶³
J. JUNKER,^{8,9} C. V. KALAGHATGI,⁶⁸ V. KALOGERA,⁵⁹ B. KAMAI,¹ S. KANDHASAMY,⁸⁴ G. KANG,³⁸ J. B. KANNER,¹
S. J. KAPADIA,²³ S. KARKI,⁷⁰ K. S. KARVINEN,^{8,9} R. KASHYAP,¹⁶ M. KASPRZACK,¹ S. KATSANEVAS,²⁸ E. KATSAVOUNIDIS,¹²
W. KATZMAN,⁷ S. KAUFER,⁹ K. KAWABE,⁴⁵ N. V. KEERTHANA,³ F. KÉFÉLIAN,⁶⁵ D. KEITEL,⁴⁴ R. KENNEDY,¹⁰⁸
J. S. KEY,¹³³ F. Y. KHALILI,²⁶ H. KHAN,²⁶ I. KHAN,^{14,31} S. KHAN,^{8,9} Z. KHAN,¹⁰⁷ E. A. KHAZANOV,¹³⁴ M. KHURSHEED,⁶¹
N. KIJNBUNHOO,²¹ CHUNGLEE KIM,¹³⁵ J. C. KIM,¹³⁶ K. KIM,⁹⁰ W. KIM,⁵⁵ W. S. KIM,¹³⁷ Y.-M. KIM,¹³⁸ C. KIMBALL,⁵⁹
E. J. KING,⁵⁵ P. J. KING,⁴⁵ M. KINLEY-HANLON,¹²⁶ R. KIRCHHOFF,^{8,9} J. S. KISSEL,⁴⁵ L. KLEYBOLTE,¹³⁹ J. H. KLIKA,²³
S. KLIMENKO,⁴⁸ T. D. KNOWLES,³⁹ P. KOCH,^{8,9} S. M. KOEHLLENBECK,^{8,9} G. KOEKOEK,^{37,140} S. KOLEY,³⁷
V. KONDRASHOV,¹ A. KONTOS,¹² N. KOPER,^{8,9} M. KOROBKO,¹³⁹ W. Z. KORTH,¹ I. KOWALSKA,⁷⁴ D. B. KOZAK,¹
V. KRINGEL,^{8,9} N. KRISHNENDU,²⁹ A. KRÓLAK,^{141,142} G. KUEHN,^{8,9} A. KUMAR,¹²⁹ P. KUMAR,¹⁴³ R. KUMAR,¹⁰⁷
S. KUMAR,¹⁶ L. KUO,⁸⁷ A. KUTYNIA,¹⁴¹ S. KWANG,²³ B. D. LACKEY,³⁶ K. H. LAI,⁹⁰ T. L. LAM,⁹⁰ M. LANDRY,⁴⁵
B. B. LANE,¹² R. N. LANG,¹⁴⁴ J. LANGE,⁵⁸ B. LANTZ,⁴⁹ R. K. LANZA,¹² A. LARTAUX-VOLLARD,²⁵ P. D. LASKY,⁶
M. LAXEN,⁷ A. LAZZARINI,¹ C. LAZZARO,⁵² P. LEACI,^{112,32} S. LEAVEY,^{8,9} Y. K. LECOEUQUE,⁴⁵ C. H. LEE,⁹² H. K. LEE,¹⁴⁵
H. M. LEE,¹⁴⁶ H. W. LEE,¹³⁶ J. LEE,⁹¹ K. LEE,⁴⁴ J. LEHMANN,^{8,9} A. LENON,³⁹ N. LEROY,²⁵ N. LETENDRE,³³ Y. LEVIN,^{6,98}
J. LI,⁸² K. J. L. LI,⁹⁰ T. G. F. LI,⁹⁰ X. LI,⁴⁶ F. LIN,⁶ F. LINDE,³⁷ S. D. LINKER,¹¹⁰ T. B. LITTENBERG,¹⁴⁷ J. LIU,⁶³
X. LIU,²³ R. K. L. LO,^{90,1} N. A. LOCKERBIE,²⁴ L. T. LONDON,⁶⁸ A. LONGO,^{148,149} M. LORENZINI,^{14,15} V. LORIETTE,¹⁵⁰
M. LORMAND,⁷ G. LOSURDO,¹⁹ J. D. LOUGH,^{8,9} C. O. LOUSTO,⁵⁸ G. LOVELACE,²⁶ M. E. LOWER,¹⁵¹ H. LÜCK,^{9,8}
D. LUMACA,^{30,31} A. P. LUNDGREN,¹⁵² R. LYNCH,¹² Y. MA,⁴⁶ R. MACAS,⁶⁸ S. MACFOY,²⁴ M. MACINNIS,¹²
D. M. MACLEOD,⁶⁸ A. MACQUET,⁶⁵ F. MAGAÑA-SANDOVAL,⁴² L. MAGAÑA ZERTUCHE,⁸⁴ R. M. MAGEE,⁸⁶ E. MAJORANA,³²
I. MAKSIMOVIC,¹⁵⁰ A. MALIK,⁶¹ N. MAN,⁶⁵ V. MANDIC,⁴³ V. MANGANO,⁴⁴ G. L. MANSELL,^{45,12} M. MANSKE,^{23,21}
M. MANTOVANI,²⁸ F. MARCHESONI,^{50,41} F. MARION,³³ S. MÁRKA,⁹⁸ Z. MÁRKA,⁹⁸ C. MARKAKIS,^{10,17} A. S. MARKOSYAN,⁴⁹
A. MARKOWITZ,¹ E. MAROS,¹ A. MARQUINA,¹⁰² S. MARSAT,³⁶ F. MARTELLI,^{72,73} I. W. MARTIN,⁴⁴ R. M. MARTIN,³⁵
D. V. MARTYNOV,¹¹ K. MASON,¹² E. MASSERA,¹⁰⁸ A. MASSEROT,³³ T. J. MASSINGER,¹ M. MASSO-REID,⁴⁴
S. MASTROGIOVANNI,^{112,32} A. MATAS,^{43,36} F. MATICHARD,^{1,12} L. MATONE,⁹⁸ N. MAVALVALA,¹² N. MAZUMDER,⁶⁹
J. J. McCANN,⁶³ R. MCCARTHY,⁴⁵ D. E. McCLELLAND,²¹ S. McCORMICK,⁷ L. McCULLER,¹² S. C. McGUIRE,¹⁵³
J. McIVER,¹ D. J. McMANUS,²¹ T. McRAE,²¹ S. T. McWILLIAMS,³⁹ D. MEACHER,⁸⁶ G. D. MEADORS,⁶ M. MEHMET,^{8,9}
A. K. MEHTA,¹⁶ J. MEIDAM,³⁷ A. MELATOS,⁹⁷ G. MENDELL,⁴⁵ R. A. MERCER,²³ L. MERENI,²² E. L. MERILH,⁴⁵
M. MERZOUGUI,⁶⁵ S. MESHKOV,¹ C. MESSENGER,⁴⁴ C. MESSICK,⁸⁶ R. METZDORFF,⁷¹ P. M. MEYERS,⁹⁷ H. MIAO,¹¹
C. MICHEL,²² H. MIDDLETON,⁹⁷ E. E. MIKHAILOV,¹⁵⁴ L. MILANO,^{79,5} A. L. MILLER,⁴⁸ A. MILLER,^{112,32} M. MILLHOUSE,⁵³
J. C. MILLS,⁶⁸ M. C. MILOVICH-GOFF,¹¹⁰ O. MINAZZOLI,^{65,155} Y. MINENKOV,³¹ A. MISHKIN,⁴⁸ C. MISHRA,¹⁵⁶
T. MISTRY,¹⁰⁸ S. MITRA,³ V. P. MITROFANOV,⁶² G. MITSSELMACHER,⁴⁸ R. MITTLEMAN,¹² G. MO,⁹³ D. MOFFA,¹¹⁴
K. MOGUSHI,⁸⁴ S. R. P. MOHAPATRA,¹² M. MONTANI,^{72,73} C. J. MOORE,¹⁰ D. MORARU,⁴⁵ G. MORENO,⁴⁵ S. MORISAKI,⁸¹
B. MOURS,³³ C. M. MOW-LOWRY,¹¹ ARUNAVA MUKHERJEE,^{8,9} D. MUKHERJEE,²³ S. MUKHERJEE,¹⁰⁴ N. MUKUND,³
A. MULLAVEY,⁷ J. MUNCH,⁵⁵ E. A. MUÑIZ,⁴² M. MURATORE,³⁴ P. G. MURRAY,⁴⁴ A. NAGAR,^{85,157,158} I. NARDECCHIA,^{30,31}
L. NATICCHIONI,^{112,32} R. K. NAYAK,¹⁵⁹ J. NEILSON,¹¹⁰ G. NELEMANS,^{64,37} T. J. N. NELSON,⁷ M. NERY,^{8,9} A. NEUNZERT,¹²⁵
K. Y. NG,¹² S. NG,⁵⁵ P. NGUYEN,⁷⁰ D. NICHOLS,^{127,37} S. NISSANKE,^{127,37} F. NOCERA,²⁸ C. NORTH,⁶⁸ L. K. NUTTALL,¹⁵²
M. OBERGAULINGER,²⁰ J. OBERLING,⁴⁵ B. D. O'BRIEN,⁴⁸ G. D. O'DEA,¹¹⁰ G. H. OGIN,¹⁶⁰ J. J. OH,¹³⁷ S. H. OH,¹³⁷
F. OHME,^{8,9} H. OHTA,⁸¹ M. A. OKADA,¹³ M. OLIVER,⁹⁹ P. OPPERMANN,^{8,9} RICHARD J. ORAM,⁷ B. O'REILLY,⁷
R. G. ORMISTON,⁴⁸ L. F. ORTEGA,⁴⁸ R. O'SHAUGHNESSY,⁵⁸ S. OSSOKINE,³⁶ D. J. OTTAWAY,⁵⁵ H. OVERMIER,⁷
B. J. OWEN,⁸³ A. E. PACE,⁸⁶ G. PAGANO,^{18,19} M. A. PAGE,⁶³ A. PAI,¹²¹ S. A. PAI,⁶¹ J. R. PALAMOS,⁷⁰ O. PALASHOV,¹³⁴

C. PALOMBA,³² A. PAL-SINGH,¹³⁹ HUANG-WEI PAN,⁸⁷ B. PANG,⁴⁶ P. T. H. PANG,⁹⁰ C. PANKOW,⁵⁹ F. PANNARALE,^{112,32}
 B. C. PANT,⁶¹ F. PAOLETTI,¹⁹ A. PAOLI,²⁸ A. PARIDA,³ W. PARKER,^{7,153} D. PASCUCCI,⁴⁴ A. PASQUALETTI,²⁸
 R. PASSAQUIETI,^{18,19} D. PASSUELLO,¹⁹ M. PATIL,¹⁴² B. PATRICELLI,^{18,19} B. L. PEARLSTONE,⁴⁴ C. PEDERSEN,⁶⁸
 M. PEDRAZA,¹ R. PEDURAND,^{22,161} A. PELE,⁷ S. PENN,¹⁶² C. J. PEREZ,⁴⁵ A. PERRECA,^{111,95} H. P. PFEIFFER,^{36,117}
 M. PHELPS,^{8,9} K. S. PHUKON,³ O. J. PICCINNI,^{112,32} M. PICHOT,⁶⁵ F. PIERGIOVANNI,^{72,73} G. PILLANT,²⁸ L. PINARD,²²
 M. PIRELLO,⁴⁵ M. PITKIN,⁴⁴ R. POGGIANI,^{18,19} D. Y. T. PONG,⁹⁰ S. PONRATHNAM,³ P. POPOLIZIO,²⁸ E. K. PORTER,²⁷
 J. POWELL,¹⁵¹ A. K. PRAJAPATI,¹⁰⁷ J. PRASAD,³ K. PRASAI,⁴⁹ R. PRASANNA,¹²⁹ G. PRATTEN,⁹⁹ T. PRESTEGARD,²³
 S. PRIVITERA,³⁶ G. A. PRODI,^{111,95} L. G. PROKHOROV,⁶² O. PUNCKEN,^{8,9} M. PUNTURO,⁴¹ P. PUPPO,³² M. PÜRRER,³⁶
 H. QI,²³ V. QUETSCHKE,¹⁰⁴ P. J. QUINONEZ,³⁴ E. A. QUINTERO,¹ R. QUITZOW-JAMES,⁷⁰ F. J. RAAB,⁴⁵ H. RADKINS,⁴⁵
 N. RADULESCU,⁶⁵ P. RAFFAI,¹⁰⁶ S. RAJA,⁶¹ C. RAJAN,⁶¹ B. RAJBHANDARI,⁸³ M. RAKHMANOV,¹⁰⁴ K. E. RAMIREZ,¹⁰⁴
 A. RAMOS-BUADES,⁹⁹ JAVED RANA,³ K. RAO,⁵⁹ P. RAPAGNANI,^{112,32} V. RAYMOND,⁶⁸ M. RAZZANO,^{18,19} J. READ,²⁶
 T. REGIMBAU,³³ L. REI,⁶⁰ S. REID,²⁴ D. H. REITZE,^{1,48} W. REN,¹⁷ F. RICCI,^{112,32} C. J. RICHARDSON,³⁴
 J. W. RICHARDSON,¹ P. M. RICKER,¹⁷ K. RILES,¹²⁵ M. RIZZO,⁵⁹ N. A. ROBERTSON,^{1,44} R. ROBBIE,⁴⁴ F. ROBINET,²⁵
 A. ROCCHI,³¹ L. ROLLAND,³³ J. G. ROLLINS,¹ V. J. ROMA,⁷⁰ M. ROMANELLI,⁶⁷ R. ROMANO,^{4,5} C. L. ROMEL,⁴⁵
 J. H. ROMIE,⁷ K. ROSE,¹¹⁴ D. ROSIŃSKA,^{163,54} S. G. ROSOFSKY,¹⁷ M. P. ROSS,¹⁶⁴ S. ROWAN,⁴⁴ A. RÜDIGER,^{8,9, †}
 P. RUGGI,²⁸ G. RUTINS,¹⁶⁵ K. RYAN,⁴⁵ S. SACHDEV,¹ T. SADECKI,⁴⁵ M. SAKELLARIADOU,¹³¹ L. SALCONI,²⁸ M. SALEEM,²⁹
 A. SAMAJDAR,³⁷ L. SAMMUT,⁶ E. J. SANCHEZ,¹ L. E. SANCHEZ,¹ N. SANCHIS-GUAL,²⁰ V. SANDBERG,⁴⁵ J. R. SANDERS,⁴²
 K. A. SANTIAGO,³⁵ N. SARIN,⁶ B. SASSOLAS,²² P. R. SAULSON,⁴² O. SAUTER,¹²⁵ R. L. SAVAGE,⁴⁵ P. SCHALE,⁷⁰
 M. SCHEEL,⁴⁶ J. SCHEUER,⁵⁹ P. SCHMIDT,⁶⁴ R. SCHNABEL,¹³⁹ R. M. S. SCHOFIELD,⁷⁰ A. SCHÖNBECK,¹³⁹ E. SCHREIBER,^{8,9}
 B. W. SCHULTE,^{8,9} B. F. SCHUTZ,⁶⁸ S. G. SCHWALBE,³⁴ J. SCOTT,⁴⁴ S. M. SCOTT,²¹ E. SEIDEL,¹⁷ D. SELLERS,⁷
 A. S. SENGUPTA,¹⁶⁶ N. SENNETT,³⁶ D. SENTENAC,²⁸ V. SEQUINO,^{30,31,14} A. SERGEEV,¹³⁴ Y. SETYAWATI,^{8,9}
 D. A. SHADDOCK,²¹ T. SHAFFER,⁴⁵ M. S. SHAHRIAR,⁵⁹ M. B. SHANER,¹¹⁰ L. SHAO,³⁶ P. SHARMA,⁶¹ P. SHAWHAN,⁷⁶
 H. SHEN,¹⁷ R. SHINK,¹⁶⁷ D. H. SHOEMAKER,¹² D. M. SHOEMAKER,⁷⁷ S. SHYAMSUNDAR,⁶¹ K. SIELLEZ,⁷⁷ M. SIENIAWSKA,⁵⁴
 D. SIGG,⁴⁵ A. D. SILVA,¹³ L. P. SINGER,⁸⁰ N. SINGH,⁷⁴ A. SINGHAL,^{14,32} A. M. SINTES,⁹⁹ S. SITMUKHAMBETOV,¹⁰⁴
 V. SKLIRIS,⁶⁸ B. J. J. SLAGMOLEN,²¹ T. J. SLAVEN-BLAIR,⁶³ J. R. SMITH,²⁶ R. J. E. SMITH,⁶ S. SOMALA,¹⁶⁸ E. J. SON,¹³⁷
 B. SORAZU,⁴⁴ F. SORRENTINO,⁶⁰ T. SOURADEEP,³ E. SOWELL,⁸³ A. P. SPENCER,⁴⁴ A. K. SRIVASTAVA,¹⁰⁷ V. SRIVASTAVA,⁴²
 K. STAATS,⁵⁹ C. STACHIE,⁶⁵ M. STANDKE,^{8,9} D. A. STEER,²⁷ M. STEINKE,^{8,9} J. STEINLECHNER,^{139,44} S. STEINLECHNER,¹³⁹
 D. STEINMEYER,^{8,9} S. P. STEVENSON,¹⁵¹ D. STOCKS,⁴⁹ R. STONE,¹⁰⁴ D. J. STOPS,¹¹ K. A. STRAIN,⁴⁴ G. STRATTA,^{72,73}
 S. E. STRIGIN,⁶² A. STRUNK,⁴⁵ R. STURANI,¹⁶⁹ A. L. STUVER,¹⁷⁰ V. SUDHIR,¹² T. Z. SUMMERSCALES,¹⁷¹ L. SUN,¹
 S. SUNIL,¹⁰⁷ J. SURESH,³ P. J. SUTTON,⁶⁸ B. L. SWINKELS,³⁷ M. J. SZCZEPAŃCZYK,³⁴ M. TACCA,³⁷ S. C. TAIT,⁴⁴
 C. TALBOT,⁶ D. TALUKDER,⁷⁰ D. B. TANNER,⁴⁸ M. TÁPAI,¹²² A. TARACCHINI,³⁶ J. D. TASSON,⁹³ R. TAYLOR,¹ F. THIES,^{8,9}
 M. THOMAS,⁷ P. THOMAS,⁴⁵ S. R. THONDAPU,⁶¹ K. A. THORNE,⁷ E. THRANE,⁶ SHUBHANSU TIWARI,^{111,95}
 SRISHTI TIWARI,¹²³ V. TIWARI,⁶⁸ K. TOLAND,⁴⁴ M. TONELLI,^{18,19} Z. TORNASI,⁴⁴ A. TORRES-FORNÉ,¹⁷² C. I. TORRIE,¹
 D. TÖYRÄ,¹¹ F. TRAVASSO,^{28,41} G. TRAYLOR,⁷ M. C. TRINGALI,⁷⁴ A. TROVATO,²⁷ L. TROZZO,^{173,19} R. TRUDEAU,¹
 K. W. TSANG,³⁷ M. TSE,¹² R. TSO,⁴⁶ L. TSUKADA,⁸¹ D. TSUNA,⁸¹ D. TUYENBAYEV,¹⁰⁴ K. UENO,⁸¹ D. UGOLINI,¹⁷⁴
 C. S. UNNIKRISHNAN,¹²³ A. L. URBAN,² S. A. USMAN,⁶⁸ H. VAHLBRUCH,⁹ G. VAJENTE,¹ G. VALDES,² N. VAN BAKEL,³⁷
 M. VAN BEUZEKOM,³⁷ J. F. J. VAN DEN BRAND,^{75,37} C. VAN DEN BROECK,^{37,175} D. C. VANDER-HYDE,⁴²
 L. VAN DER SCHAAP,³⁷ J. V. VAN HEIJNINGEN,⁶³ A. A. VAN VEGGEL,⁴⁴ M. VARDARO,^{51,52} V. VARMA,⁴⁶ S. VASS,¹
 M. VASÚTH,⁴⁷ A. VECCHIO,¹¹ G. VEDOVATO,⁵² J. VEITCH,⁴⁴ P. J. VEITCH,⁵⁵ K. VENKATESWARA,¹⁶⁴ G. VENUGOPALAN,¹
 D. VERKINDT,³³ F. VETRANO,^{72,73} A. VICERÉ,^{72,73} A. D. VIETS,²³ D. J. VINE,¹⁶⁵ J.-Y. VINET,⁶⁵ S. VITALE,¹² T. VO,⁴²
 H. VOCCA,^{40,41} C. VORVICK,⁴⁵ S. P. VYATCHANIN,⁶² A. R. WADE,¹ L. E. WADE,¹¹⁴ M. WADE,¹¹⁴ R. WALET,³⁷
 M. WALKER,²⁶ L. WALLACE,¹ S. WALSH,²³ G. WANG,^{14,19} H. WANG,¹¹ J. Z. WANG,¹²⁵ W. H. WANG,¹⁰⁴ Y. F. WANG,⁹⁰
 R. L. WARD,²¹ Z. A. WARDEN,³⁴ J. WARNER,⁴⁵ M. WAS,³³ J. WATCHI,¹⁰⁰ B. WEAVER,⁴⁵ L.-W. WEI,^{8,9} M. WEINERT,^{8,9}
 A. J. WEINSTEIN,¹ R. WEISS,¹² F. WELLMANN,^{8,9} L. WEN,⁶³ E. K. WESSEL,¹⁷ P. WESSELS,^{8,9} J. W. WESTHOUSE,³⁴
 K. WETTE,²¹ J. T. WHELAN,⁵⁸ B. F. WHITING,⁴⁸ C. WHITTLE,¹² D. M. WILKEN,^{8,9} D. WILLIAMS,⁴⁴
 A. R. WILLIAMSON,^{127,37} J. L. WILLIS,¹ B. WILLKE,^{8,9} M. H. WIMMER,^{8,9} W. WINKLER,^{8,9} C. C. WIPF,¹ H. WITTEL,^{8,9}
 G. WOAN,⁴⁴ J. WOELER,^{8,9} J. K. WOFFORD,⁵⁸ J. WORDEN,⁴⁵ J. L. WRIGHT,⁴⁴ D. S. WU,^{8,9} D. M. WYSOCKI,⁵⁸ L. XIAO,¹
 H. YAMAMOTO,¹ C. C. YANCEY,⁷⁶ L. YANG,¹¹³ M. J. YAP,²¹ M. YAZBACK,⁴⁸ D. W. YEELES,⁶⁸ HANG YU,¹² HAOCUN YU,¹²
 S. H. R. YUEN,⁹⁰ M. YVERT,³³ A. K. ZADROŻNY,^{104,141} M. ZANOLIN,³⁴ T. ZELENKOVA,²⁸ J.-P. ZENDRI,⁵² M. ZEVIN,⁵⁹
 J. ZHANG,⁶³ L. ZHANG,¹ T. ZHANG,⁴⁴ C. ZHAO,⁶³ M. ZHOU,⁵⁹ Z. ZHOU,⁵⁹ X. J. ZHU,⁶ M. E. ZUCKER,^{1,12} AND J. ZWEIZIG¹

THE LIGO SCIENTIFIC COLLABORATION AND THE VIRGO COLLABORATION

¹LIGO, California Institute of Technology, Pasadena, CA 91125, USA

²Louisiana State University, Baton Rouge, LA 70803, USA

³Inter-University Centre for Astronomy and Astrophysics, Pune 411007, India

⁴Università di Salerno, Fisciano, I-84084 Salerno, Italy

- ⁵ *INFN, Sezione di Napoli, Complesso Universitario di Monte S. Angelo, I-80126 Napoli, Italy*
- ⁶ *OzGrav, School of Physics & Astronomy, Monash University, Clayton 3800, Victoria, Australia*
- ⁷ *LIGO Livingston Observatory, Livingston, LA 70754, USA*
- ⁸ *Max Planck Institute for Gravitational Physics (Albert Einstein Institute), D-30167 Hannover, Germany*
- ⁹ *Leibniz Universität Hannover, D-30167 Hannover, Germany*
- ¹⁰ *University of Cambridge, Cambridge CB2 1TN, United Kingdom*
- ¹¹ *University of Birmingham, Birmingham B15 2TT, United Kingdom*
- ¹² *LIGO, Massachusetts Institute of Technology, Cambridge, MA 02139, USA*
- ¹³ *Instituto Nacional de Pesquisas Espaciais, 12227-010 São José dos Campos, São Paulo, Brazil*
- ¹⁴ *Gran Sasso Science Institute (GSSI), I-67100 L'Aquila, Italy*
- ¹⁵ *INFN, Laboratori Nazionali del Gran Sasso, I-67100 Assergi, Italy*
- ¹⁶ *International Centre for Theoretical Sciences, Tata Institute of Fundamental Research, Bengaluru 560089, India*
- ¹⁷ *NCSA, University of Illinois at Urbana-Champaign, Urbana, IL 61801, USA*
- ¹⁸ *Università di Pisa, I-56127 Pisa, Italy*
- ¹⁹ *INFN, Sezione di Pisa, I-56127 Pisa, Italy*
- ²⁰ *Departamento de Astronomía y Astrofísica, Universitat de València, E-46100 Burjassot, València, Spain*
- ²¹ *OzGrav, Australian National University, Canberra, Australian Capital Territory 0200, Australia*
- ²² *Laboratoire des Matériaux Avancés (LMA), CNRS/IN2P3, F-69622 Villeurbanne, France*
- ²³ *University of Wisconsin-Milwaukee, Milwaukee, WI 53201, USA*
- ²⁴ *SUPA, University of Strathclyde, Glasgow G1 1XQ, United Kingdom*
- ²⁵ *LAL, Univ. Paris-Sud, CNRS/IN2P3, Université Paris-Saclay, F-91898 Orsay, France*
- ²⁶ *California State University Fullerton, Fullerton, CA 92831, USA*
- ²⁷ *APC, AstroParticule et Cosmologie, Université Paris Diderot, CNRS/IN2P3, CEA/Irfu, Observatoire de Paris, Sorbonne Paris Cité, F-75205 Paris Cedex 13, France*
- ²⁸ *European Gravitational Observatory (EGO), I-56021 Cascina, Pisa, Italy*
- ²⁹ *Chennai Mathematical Institute, Chennai 603103, India*
- ³⁰ *Università di Roma Tor Vergata, I-00133 Roma, Italy*
- ³¹ *INFN, Sezione di Roma Tor Vergata, I-00133 Roma, Italy*
- ³² *INFN, Sezione di Roma, I-00185 Roma, Italy*
- ³³ *Laboratoire d'Annecy de Physique des Particules (LAPP), Univ. Grenoble Alpes, Université Savoie Mont Blanc, CNRS/IN2P3, F-74941 Annecy, France*
- ³⁴ *Embry-Riddle Aeronautical University, Prescott, AZ 86301, USA*
- ³⁵ *Montclair State University, Montclair, NJ 07043, USA*
- ³⁶ *Max Planck Institute for Gravitational Physics (Albert Einstein Institute), D-14476 Potsdam-Golm, Germany*
- ³⁷ *Nikhef, Science Park 105, 1098 XG Amsterdam, The Netherlands*
- ³⁸ *Korea Institute of Science and Technology Information, Daejeon 34141, South Korea*
- ³⁹ *West Virginia University, Morgantown, WV 26506, USA*
- ⁴⁰ *Università di Perugia, I-06123 Perugia, Italy*
- ⁴¹ *INFN, Sezione di Perugia, I-06123 Perugia, Italy*
- ⁴² *Syracuse University, Syracuse, NY 13244, USA*
- ⁴³ *University of Minnesota, Minneapolis, MN 55455, USA*
- ⁴⁴ *SUPA, University of Glasgow, Glasgow G12 8QQ, United Kingdom*
- ⁴⁵ *LIGO Hanford Observatory, Richland, WA 99352, USA*
- ⁴⁶ *Caltech CaRT, Pasadena, CA 91125, USA*
- ⁴⁷ *Wigner RCP, RMKI, H-1121 Budapest, Konkoly Thege Miklós út 29-33, Hungary*
- ⁴⁸ *University of Florida, Gainesville, FL 32611, USA*
- ⁴⁹ *Stanford University, Stanford, CA 94305, USA*
- ⁵⁰ *Università di Camerino, Dipartimento di Fisica, I-62032 Camerino, Italy*
- ⁵¹ *Università di Padova, Dipartimento di Fisica e Astronomia, I-35131 Padova, Italy*
- ⁵² *INFN, Sezione di Padova, I-35131 Padova, Italy*
- ⁵³ *Montana State University, Bozeman, MT 59717, USA*
- ⁵⁴ *Nicolaus Copernicus Astronomical Center, Polish Academy of Sciences, 00-716, Warsaw, Poland*
- ⁵⁵ *OzGrav, University of Adelaide, Adelaide, South Australia 5005, Australia*
- ⁵⁶ *Theoretisch-Physikalisches Institut, Friedrich-Schiller-Universität Jena, D-07743 Jena, Germany*

- ⁵⁷ INFN, Sezione di Milano Bicocca, Gruppo Collegato di Parma, I-43124 Parma, Italy
- ⁵⁸ Rochester Institute of Technology, Rochester, NY 14623, USA
- ⁵⁹ Center for Interdisciplinary Exploration & Research in Astrophysics (CIERA), Northwestern University, Evanston, IL 60208, USA
- ⁶⁰ INFN, Sezione di Genova, I-16146 Genova, Italy
- ⁶¹ RRCAT, Indore, Madhya Pradesh 452013, India
- ⁶² Faculty of Physics, Lomonosov Moscow State University, Moscow 119991, Russia
- ⁶³ OzGrav, University of Western Australia, Crawley, Western Australia 6009, Australia
- ⁶⁴ Department of Astrophysics/IMAPP, Radboud University Nijmegen, P.O. Box 9010, 6500 GL Nijmegen, The Netherlands
- ⁶⁵ Artemis, Université Côte d'Azur, Observatoire Côte d'Azur, CNRS, CS 34229, F-06304 Nice Cedex 4, France
- ⁶⁶ Physik-Institut, University of Zurich, Winterthurerstrasse 190, 8057 Zurich, Switzerland
- ⁶⁷ Univ Rennes, CNRS, Institut FOTON - UMR6082, F-3500 Rennes, France
- ⁶⁸ Cardiff University, Cardiff CF24 3AA, United Kingdom
- ⁶⁹ Washington State University, Pullman, WA 99164, USA
- ⁷⁰ University of Oregon, Eugene, OR 97403, USA
- ⁷¹ Laboratoire Kastler Brossel, Sorbonne Université, CNRS, ENS-Université PSL, Collège de France, F-75005 Paris, France
- ⁷² Università degli Studi di Urbino 'Carlo Bo,' I-61029 Urbino, Italy
- ⁷³ INFN, Sezione di Firenze, I-50019 Sesto Fiorentino, Firenze, Italy
- ⁷⁴ Astronomical Observatory Warsaw University, 00-478 Warsaw, Poland
- ⁷⁵ VU University Amsterdam, 1081 HV Amsterdam, The Netherlands
- ⁷⁶ University of Maryland, College Park, MD 20742, USA
- ⁷⁷ School of Physics, Georgia Institute of Technology, Atlanta, GA 30332, USA
- ⁷⁸ Université Claude Bernard Lyon 1, F-69622 Villeurbanne, France
- ⁷⁹ Università di Napoli 'Federico II,' Complesso Universitario di Monte S. Angelo, I-80126 Napoli, Italy
- ⁸⁰ NASA Goddard Space Flight Center, Greenbelt, MD 20771, USA
- ⁸¹ RESCEU, University of Tokyo, Tokyo, 113-0033, Japan.
- ⁸² Tsinghua University, Beijing 100084, China
- ⁸³ Texas Tech University, Lubbock, TX 79409, USA
- ⁸⁴ The University of Mississippi, University, MS 38677, USA
- ⁸⁵ Museo Storico della Fisica e Centro Studi e Ricerche "Enrico Fermi", I-00184 Roma, Italyrico Fermi, I-00184 Roma, Italy
- ⁸⁶ The Pennsylvania State University, University Park, PA 16802, USA
- ⁸⁷ National Tsing Hua University, Hsinchu City, 30013 Taiwan, Republic of China
- ⁸⁸ Charles Sturt University, Wagga Wagga, New South Wales 2678, Australia
- ⁸⁹ University of Chicago, Chicago, IL 60637, USA
- ⁹⁰ The Chinese University of Hong Kong, Shatin, NT, Hong Kong
- ⁹¹ Seoul National University, Seoul 08826, South Korea
- ⁹² Pusan National University, Busan 46241, South Korea
- ⁹³ Carleton College, Northfield, MN 55057, USA
- ⁹⁴ INAF, Osservatorio Astronomico di Padova, I-35122 Padova, Italy
- ⁹⁵ INFN, Trento Institute for Fundamental Physics and Applications, I-38123 Povo, Trento, Italy
- ⁹⁶ Dipartimento di Fisica, Università degli Studi di Genova, I-16146 Genova, Italy
- ⁹⁷ OzGrav, University of Melbourne, Parkville, Victoria 3010, Australia
- ⁹⁸ Columbia University, New York, NY 10027, USA
- ⁹⁹ Universitat de les Illes Balears, IAC3—IEEC, E-07122 Palma de Mallorca, Spain
- ¹⁰⁰ Université Libre de Bruxelles, Brussels 1050, Belgium
- ¹⁰¹ Sonoma State University, Rohnert Park, CA 94928, USA
- ¹⁰² Departamento de Matemáticas, Universitat de València, E-46100 Burjassot, València, Spain
- ¹⁰³ University of Rhode Island, Kingston, RI 02881, USA
- ¹⁰⁴ The University of Texas Rio Grande Valley, Brownsville, TX 78520, USA
- ¹⁰⁵ Bellevue College, Bellevue, WA 98007, USA
- ¹⁰⁶ MTA-ELTE Astrophysics Research Group, Institute of Physics, Eötvös University, Budapest 1117, Hungary
- ¹⁰⁷ Institute for Plasma Research, Bhat, Gandhinagar 382428, India
- ¹⁰⁸ The University of Sheffield, Sheffield S10 2TN, United Kingdom
- ¹⁰⁹ Dipartimento di Scienze Matematiche, Fisiche e Informatiche, Università di Parma, I-43124 Parma, Italy
- ¹¹⁰ California State University, Los Angeles, 5151 State University Dr, Los Angeles, CA 90032, USA

- ¹¹¹ *Università di Trento, Dipartimento di Fisica, I-38123 Povo, Trento, Italy*
- ¹¹² *Università di Roma 'La Sapienza,' I-00185 Roma, Italy*
- ¹¹³ *Colorado State University, Fort Collins, CO 80523, USA*
- ¹¹⁴ *Kenyon College, Gambier, OH 43022, USA*
- ¹¹⁵ *Christopher Newport University, Newport News, VA 23606, USA*
- ¹¹⁶ *National Astronomical Observatory of Japan, 2-21-1 Osawa, Mitaka, Tokyo 181-8588, Japan*
- ¹¹⁷ *Canadian Institute for Theoretical Astrophysics, University of Toronto, Toronto, Ontario M5S 3H8, Canada*
- ¹¹⁸ *Observatori Astronòmic, Universitat de València, E-46980 Paterna, València, Spain*
- ¹¹⁹ *School of Mathematics, University of Edinburgh, Edinburgh EH9 3FD, United Kingdom*
- ¹²⁰ *Institute Of Advanced Research, Gandhinagar 382426, India*
- ¹²¹ *Indian Institute of Technology Bombay, Powai, Mumbai 400 076, India*
- ¹²² *University of Szeged, Dóm tér 9, Szeged 6720, Hungary*
- ¹²³ *Tata Institute of Fundamental Research, Mumbai 400005, India*
- ¹²⁴ *INAF, Osservatorio Astronomico di Capodimonte, I-80131, Napoli, Italy*
- ¹²⁵ *University of Michigan, Ann Arbor, MI 48109, USA*
- ¹²⁶ *American University, Washington, D.C. 20016, USA*
- ¹²⁷ *GRAPPA, Anton Pannekoek Institute for Astronomy and Institute of High-Energy Physics, University of Amsterdam, Science Park 904, 1098 XH Amsterdam, The Netherlands*
- ¹²⁸ *Delta Institute for Theoretical Physics, Science Park 904, 1090 GL Amsterdam, The Netherlands*
- ¹²⁹ *Directorate of Construction, Services & Estate Management, Mumbai 400094 India*
- ¹³⁰ *University of Białystok, 15-424 Białystok, Poland*
- ¹³¹ *King's College London, University of London, London WC2R 2LS, United Kingdom*
- ¹³² *University of Southampton, Southampton SO17 1BJ, United Kingdom*
- ¹³³ *University of Washington Bothell, Bothell, WA 98011, USA*
- ¹³⁴ *Institute of Applied Physics, Nizhny Novgorod, 603950, Russia*
- ¹³⁵ *Ewha Womans University, Seoul 03760, South Korea*
- ¹³⁶ *Inje University Gimhae, South Gyeongsang 50834, South Korea*
- ¹³⁷ *National Institute for Mathematical Sciences, Daejeon 34047, South Korea*
- ¹³⁸ *Ulsan National Institute of Science and Technology, Ulsan 44919, South Korea*
- ¹³⁹ *Universität Hamburg, D-22761 Hamburg, Germany*
- ¹⁴⁰ *Maastricht University, P.O. Box 616, 6200 MD Maastricht, The Netherlands*
- ¹⁴¹ *NCBJ, 05-400 Świerk-Otwock, Poland*
- ¹⁴² *Institute of Mathematics, Polish Academy of Sciences, 00656 Warsaw, Poland*
- ¹⁴³ *Cornell University, Ithaca, NY 14850, USA*
- ¹⁴⁴ *Hillsdale College, Hillsdale, MI 49242, USA*
- ¹⁴⁵ *Hanyang University, Seoul 04763, South Korea*
- ¹⁴⁶ *Korea Astronomy and Space Science Institute, Daejeon 34055, South Korea*
- ¹⁴⁷ *NASA Marshall Space Flight Center, Huntsville, AL 35811, USA*
- ¹⁴⁸ *Dipartimento di Matematica e Fisica, Università degli Studi Roma Tre, I-00146 Roma, Italy*
- ¹⁴⁹ *INFN, Sezione di Roma Tre, I-00146 Roma, Italy*
- ¹⁵⁰ *ESPCI, CNRS, F-75005 Paris, France*
- ¹⁵¹ *OzGrav, Swinburne University of Technology, Hawthorn VIC 3122, Australia*
- ¹⁵² *University of Portsmouth, Portsmouth, PO1 3FX, United Kingdom*
- ¹⁵³ *Southern University and A&M College, Baton Rouge, LA 70813, USA*
- ¹⁵⁴ *College of William and Mary, Williamsburg, VA 23187, USA*
- ¹⁵⁵ *Centre Scientifique de Monaco, 8 quai Antoine 1er, MC-98000, Monaco*
- ¹⁵⁶ *Indian Institute of Technology Madras, Chennai 600036, India*
- ¹⁵⁷ *INFN Sezione di Torino, Via P. Giuria 1, I-10125 Torino, Italy*
- ¹⁵⁸ *Institut des Hautes Etudes Scientifiques, F-91440 Bures-sur-Yvette, France*
- ¹⁵⁹ *IISER-Kolkata, Mohanpur, West Bengal 741252, India*
- ¹⁶⁰ *Whitman College, 345 Boyer Avenue, Walla Walla, WA 99362 USA*
- ¹⁶¹ *Université de Lyon, F-69361 Lyon, France*
- ¹⁶² *Hobart and William Smith Colleges, Geneva, NY 14456, USA*
- ¹⁶³ *Janusz Gil Institute of Astronomy, University of Zielona Góra, 65-265 Zielona Góra, Poland*

¹⁶⁴ *University of Washington, Seattle, WA 98195, USA*

¹⁶⁵ *SUPA, University of the West of Scotland, Paisley PA1 2BE, United Kingdom*

¹⁶⁶ *Indian Institute of Technology, Gandhinagar Ahmedabad Gujarat 382424, India*

¹⁶⁷ *Université de Montréal/Polytechnique, Montreal, Quebec H3T 1J4, Canada*

¹⁶⁸ *Indian Institute of Technology Hyderabad, Sangareddy, Khandi, Telangana 502285, India*

¹⁶⁹ *International Institute of Physics, Universidade Federal do Rio Grande do Norte, Natal RN 59078-970, Brazil*

¹⁷⁰ *Villanova University, 800 Lancaster Ave, Villanova, PA 19085, USA*

¹⁷¹ *Andrews University, Berrien Springs, MI 49104, USA*

¹⁷² *Max Planck Institute for Gravitationalphysik (Albert Einstein Institute), D-14476 Potsdam-Golm, Germany*

¹⁷³ *Università di Siena, I-53100 Siena, Italy*

¹⁷⁴ *Trinity University, San Antonio, TX 78212, USA*

¹⁷⁵ *Van Swinderen Institute for Particle Physics and Gravity, University of Groningen, Nijenborgh 4, 9747 AG Groningen, The Netherlands*

* Deceased, February 2018.

† Deceased, November 2017.

‡ Deceased, July 2018.

ABSTRACT

Equation (5) of the original paper ([Abbott et al. 2019](#)) is in error; it should read

$$\epsilon = 9.5 \times 10^{-5} \left(\frac{h_0}{10^{-24}} \right) \left(\frac{D}{1 \text{ kpc}} \right) \left(\frac{100 \text{ Hz}}{f} \right)^2. \quad (1)$$

The upper limits on ϵ presented in the original paper are unaffected by this error.

REFERENCES

Abbott, B. P., et al. 2019, ApJ, 875, 122,
doi: [10.3847/1538-4357/ab113b](https://doi.org/10.3847/1538-4357/ab113b)