

LSC S2 Author List: T040086-16-Z, September 7, 2005

- B. Abbott,¹³ R. Abbott,¹⁶ R. Adhikari,¹³ A. Ageev,^{21, 28} J. Agresti,¹³ P. Ajith,² B. Allen,⁴¹ J. Allen,¹⁴ R. Amin,¹⁷ S. B. Anderson,¹³ W. G. Anderson,³⁰ M. Araya,¹³ H. Armandula,¹³ M. Ashley,²⁹ F. Asiri,^{13, a} P. Aufmuth,³² C. Aulbert,¹ S. Babak,⁷ R. Balasubramanian,⁷ S. Ballmer,¹⁴ B. C. Barish,¹³ C. Barker,¹⁵ D. Barker,¹⁵ M. Barnes,^{13, b} B. Barr,³⁶ M. A. Barton,¹³ K. Bayer,¹⁴ R. Beausoleil,^{27, c} K. Belczynski,²⁴ R. Bennett,^{36, d} S. J. Berukoff,^{1, e} J. Betzwieser,¹⁴ B. Bhawal,¹³ I. A. Bilenko,²¹ G. Billingsley,¹³ E. Black,¹³ K. Blackburn,¹³ L. Blackburn,¹⁴ B. Bland,¹⁵ B. Bochner,^{14, f} L. Bogue,¹⁶ R. Bork,¹³ S. Bose,⁴³ P. R. Brady,⁴¹ V. B. Braginsky,²¹ J. E. Brau,³⁹ D. A. Brown,¹³ A. Bullington,²⁷ A. Bunkowski,^{2, 32} A. Buonanno,³⁷ R. Burgess,¹⁴ D. Busby,¹³ W. E. Butler,⁴⁰ R. L. Byer,²⁷ L. Cadonati,¹⁴ G. Cagnoli,³⁶ J. B. Camp,²² J. Cannizzo,²² K. Cannon,⁴¹ C. A. Cantley,³⁶ L. Cardenas,¹³ K. Carter,¹⁶ M. M. Casey,³⁶ J. Castiglione,³⁵ A. Chandler,¹³ J. Chapsky,^{13, b} P. Charlton,^{13, g} S. Chatterji,¹³ S. Chelkowski,^{2, 32} Y. Chen,¹ V. Chickarmane,^{17, h} D. Chin,³⁸ N. Christensen,⁸ D. Churches,⁷ T. Cokelaer,⁷ C. Colacino,³⁴ R. Coldwell,³⁵ M. Coles,^{16, i} D. Cook,¹⁵ T. Corbitt,¹⁴ D. Coyne,¹³ J. D. E. Creighton,⁴¹ T. D. Creighton,¹³ D. R. M. Crooks,³⁶ P. Csatorday,¹⁴ B. J. Cusack,³ C. Cutler,¹ J. Dalrymple,²⁸ E. D'Ambrosio,¹³ K. Danzmann,^{32, 2} G. Davies,⁷ E. Daw,^{17, j} D. DeBra,²⁷ T. Delker,^{35, k} V. Dergachev,³⁸ S. Desai,²⁹ R. DeSalvo,¹³ S. Dhurandhar,¹² A. Di Credico,²⁸ M. Diaz,³⁰ H. Ding,¹³ R. W. P. Drever,⁴ R. J. Dupuis,¹³ J. A. Edlund,^{13, b} P. Ehrens,¹³ E. J. Elliffe,³⁶ T. Etzel,¹³ M. Evans,¹³ T. Evans,¹⁶ S. Fairhurst,⁴¹ C. Fallnich,³² D. Farnham,¹³ M. M. Fejer,²⁷ T. Findley,²⁶ M. Fine,¹³ L. S. Finn,²⁹ K. Y. Franzen,³⁵ A. Freise,^{2, 1} R. Frey,³⁹ P. Fritschel,¹⁴ V. V. Frolov,¹⁶ M. Fyffe,¹⁶ K. S. Ganezer,⁵ J. Garofoli,¹⁵ J. A. Giaime,¹⁷ A. Gillespie,^{13, m} K. Goda,¹⁴ L. Goggins,¹³ G. González,¹⁷ S. Goßler,³² P. Grandclément,^{24, n} A. Grant,³⁶ C. Gray,¹⁵ A. M. Gretarsson,¹⁰ D. Grimmett,¹³ H. Grote,² S. Grunewald,¹ M. Guenther,¹⁵ E. Gustafson,^{27, o} R. Gustafson,³⁸ W. O. Hamilton,¹⁷ M. Hammond,¹⁶ C. Hanna,¹⁷ J. Hanson,¹⁶ C. Hardham,²⁷ J. Harms,²⁰ G. Harry,¹⁴ A. Hartunian,¹³ J. Heefner,¹³ Y. Hefetz,¹⁴ G. Heinzel,² I. S. Heng,³² M. Hennessy,²⁷ N. Hepler,²⁹ A. Heptonstall,³⁶ M. Heurs,³² M. Hewitson,² S. Hild,² N. Hindman,¹⁵ P. Hoang,¹³ J. Hough,³⁶ M. Hrynevych,^{13, p} W. Hua,²⁷ M. Ito,³⁹ Y. Itoh,¹ A. Ivanov,¹³ O. Jennrich,^{36, q} B. Johnson,¹⁵ W. W. Johnson,¹⁷ W. R. Johnston,³⁰ D. I. Jones,²⁹ G. Jones,⁷ L. Jones,¹³ D. Jungwirth,^{13, r} V. Kalogera,²⁴ E. Katsavounidis,¹⁴ K. Kawabe,¹⁵ S. Kawamura,²³ W. Kells,¹³ J. Kern,^{16, s} A. Khan,¹⁶ S. Killbourn,³⁶ C. J. Killow,³⁶ C. Kim,²⁴ C. King,¹³ P. King,¹³ S. Klimenko,³⁵ S. Koranda,⁴¹ K. Kötter,³² J. Kovalik,^{16, b} D. Kozak,¹³ B. Krishnan,¹ M. Landry,¹⁵ J. Langdale,¹⁶ B. Lantz,²⁷ R. Lawrence,¹⁴ A. Lazzarini,¹³ M. Lei,¹³ I. Leonor,³⁹ K. Libbrecht,¹³ A. Libson,⁸ P. Lindquist,¹³ S. Liu,¹³ J. Logan,^{13, t} M. Lormand,¹⁶ M. Lubinski,¹⁵ H. Lück,^{32, 2} M. Luna,³³ T. T. Lyons,^{13, t} B. Machenschalk,¹ M. MacInnis,¹⁴ M. Mageswaran,¹³ K. Mailand,¹³ W. Majid,^{13, b} M. Malec,^{2, 32} V. Mandic,¹³ F. Mann,¹³ A. Marin,^{14, u} S. Márka,⁹ E. Maros,¹³ J. Mason,^{13, v} K. Mason,¹⁴ O. Matherny,¹⁵ L. Matone,⁹ N. Mavalvala,¹⁴ R. McCarthy,¹⁵ D. E. McClelland,³ M. McHugh,¹⁹ J. W. C. McNabb,²⁹ A. Melissinos,⁴⁰ G. Mendell,¹⁵ R. A. Mercer,³⁴ S. Meshkov,¹³ E. Messaritaki,⁴¹ C. Messenger,³⁴ E. Mikhailov,¹⁴ S. Mitra,¹² V. P. Mitrofanov,²¹ G. Mitselmakher,³⁵ R. Mittleman,¹⁴ O. Miyakawa,¹³ S. Miyoki,^{13, w} S. Mohanty,³⁰ G. Moreno,¹⁵ K. Mossavi,² G. Mueller,³⁵ S. Mukherjee,³⁰ P. Murray,³⁶ E. Myers,⁴² J. Myers,¹⁵ S. Nagano,² T. Nash,¹³ R. Nayak,¹² G. Newton,³⁶ F. Nocera,¹³ J. S. Noel,⁴³ P. Nutzman,²⁴ T. Olson,²⁵ B. O'Reilly,¹⁶ D. J. Ottaway,¹⁴ A. Ottewill,^{41, x} D. Ouimette,^{13, r} H. Overmier,¹⁶ B. J. Owen,²⁹ Y. Pan,⁶ M. A. Papa,¹ V. Parameshwaraiah,¹⁵ C. Parameswariah,¹⁶ M. Pedraza,¹³ S. Penn,¹¹ M. Pitkin,³⁶ M. Plissi,³⁶ R. Prix,¹ V. Quetschke,³⁵ F. Raab,¹⁵ H. Radkins,¹⁵ R. Rahkola,³⁹ M. Rakhmanov,³⁵ S. R. Rao,¹³ K. Rawlins,^{14, y} S. Ray-Majumder,⁴¹ V. Re,³⁴ D. Redding,^{13, b} M. W. Regehr,^{13, b} T. Regimbau,⁷ S. Reid,³⁶ K. T. Reilly,¹³ K. Reithmaier,¹³ D. H. Reitze,³⁵ S. Richman,^{14, z} R. Riesen,¹⁶ K. Riles,³⁸ B. Rivera,¹⁵ A. Rizzi,^{16, aa} D. I. Robertson,³⁶ N. A. Robertson,^{27, 36} C. Robinson,⁷ L. Robison,¹³ S. Roddy,¹⁶ A. Rodriguez,¹⁷ J. Rollins,⁹ J. D. Romano,⁷ J. Romie,¹³ H. Rong,^{35, m} D. Rose,¹³ E. Rotthoff,²⁹ S. Rowan,³⁶ A. Rüdiger,² L. Ruet,¹⁴ P. Russell,¹³ K. Ryan,¹⁵ I. Salzman,¹³ V. Sandberg,¹⁵ G. H. Sanders,^{13, bb} V. Sannibale,¹³ P. Sarin,¹⁴ B. Sathyaprakash,⁷ P. R. Saulson,²⁸ R. Savage,¹⁵ A. Sazonov,³⁵ R. Schilling,² K. Schlaufman,²⁹ V. Schmidt,^{13, cc} R. Schnabel,²⁰ R. Schofield,³⁹ B. F. Schutz,^{1, 7} P. Schwinberg,¹⁵ S. M. Scott,³ S. E. Seader,⁴³ A. C. Searle,³ B. Sears,¹³ S. Seel,¹³ F. Seifert,²⁰ D. Sellers,¹⁶ A. S. Sengupta,¹² C. A. Shapiro,^{29, dd} P. Shawhan,¹³ D. H. Shoemaker,¹⁴ Q. Z. Shu,^{35, ee} A. Sibley,¹⁶ X. Siemens,⁴¹ L. Sievers,^{13, b} D. Sigg,¹⁵ A. M. Sintes,^{1, 33} J. R. Smith,² M. Smith,¹⁴ M. R. Smith,¹³ P. H. Sneddon,³⁶ R. Spero,^{13, b} O. Spjeld,¹⁶ G. Stapfer,¹⁶ D. Steussy,⁸ K. A. Strain,³⁶ D. Strom,³⁹ A. Stuver,²⁹ T. Summerscales,²⁹ M. C. Sumner,¹³ M. Sung,¹⁷ P. J. Sutton,¹³ J. Sylvestre,^{13, ff} A. Takamori,^{13, gg} D. B. Tanner,³⁵ H. Tariq,¹³ M. Tarallo,¹³ I. Taylor,⁷ R. Taylor,³⁶ R. Taylor,¹³ K. A. Thorne,²⁹ K. S. Thorne,⁶ M. Tibbets,²⁹ S. Tilav,^{13, hh} M. Tinto,^{4, b} K. V. Tokmakov,²¹ C. Torres,³⁰ C. Torrie,¹³ G. Traylor,¹⁶ W. Tyler,¹³ D. Ugolini,³¹ C. Ungarelli,³⁴ M. Vallisneri,^{6, ii} M. van Putten,¹⁴ S. Vass,¹³ A. Vecchio,³⁴ J. Veitch,³⁶ C. Vorwick,¹⁵ S. P. Vyachanin,²¹

L. Wallace,¹³ H. Walther,²⁰ H. Ward,³⁶ R. Ward,¹³ B. Ware,^{13, b} K. Watts,¹⁶ D. Webber,¹³ A. Weidner,^{20, 2}
 U. Weiland,³² A. Weinstein,¹³ R. Weiss,¹⁴ H. Welling,³² L. Wen,¹ S. Wen,¹⁷ K. Wette,³ J. T. Whelan,¹⁹
 S. E. Whitcomb,¹³ B. F. Whiting,³⁵ S. Wiley,⁵ C. Wilkinson,¹⁵ P. A. Willems,¹³ P. R. Williams,^{1, jj}
 R. Williams,⁴ B. Willke,^{32, 2} A. Wilson,¹³ B. J. Winjum,^{29, e} W. Winkler,² S. Wise,³⁵ A. G. Wiseman,⁴¹
 G. Woan,³⁶ D. Woods,⁴¹ R. Wooley,¹⁶ J. Worden,¹⁵ W. Wu,³⁵ I. Yakushin,¹⁶ H. Yamamoto,¹³ S. Yoshida,²⁶
 K. D. Zaleski,²⁹ M. Zanolini,¹⁴ I. Zawischa,^{32, kk} L. Zhang,¹³ R. Zhu,¹ N. Zotov,¹⁸ M. Zucker,¹⁶ and J. Zweizig¹³

(The LIGO Scientific Collaboration, <http://www.ligo.org>)

¹Albert-Einstein-Institut, Max-Planck-Institut für Gravitationsphysik, D-14476 Golm, Germany

²Albert-Einstein-Institut, Max-Planck-Institut für Gravitationsphysik, D-30167 Hannover, Germany

³Australian National University, Canberra, 0200, Australia

⁴California Institute of Technology, Pasadena, CA 91125, USA

⁵California State University Dominguez Hills, Carson, CA 90747, USA

⁶Caltech-CaRT, Pasadena, CA 91125, USA

⁷Cardiff University, Cardiff, CF2 3YB, United Kingdom

⁸Carleton College, Northfield, MN 55057, USA

⁹Columbia University, New York, NY 10027, USA

¹⁰Embry-Riddle Aeronautical University, Prescott, AZ 86301 USA

¹¹Hobart and William Smith Colleges, Geneva, NY 14456, USA

¹²Inter-University Centre for Astronomy and Astrophysics, Pune - 411007, India

¹³LIGO - California Institute of Technology, Pasadena, CA 91125, USA

¹⁴LIGO - Massachusetts Institute of Technology, Cambridge, MA 02139, USA

¹⁵LIGO Hanford Observatory, Richland, WA 99352, USA

¹⁶LIGO Livingston Observatory, Livingston, LA 70754, USA

¹⁷Louisiana State University, Baton Rouge, LA 70803, USA

¹⁸Louisiana Tech University, Ruston, LA 71272, USA

¹⁹Loyola University, New Orleans, LA 70118, USA

²⁰Max Planck Institut für Quantenoptik, D-85748, Garching, Germany

²¹Moscow State University, Moscow, 119992, Russia

²²NASA/Goddard Space Flight Center, Greenbelt, MD 20771, USA

²³National Astronomical Observatory of Japan, Tokyo 181-8588, Japan

²⁴Northwestern University, Evanston, IL 60208, USA

²⁵Salish Kootenai College, Pablo, MT 59855, USA

²⁶Southeastern Louisiana University, Hammond, LA 70402, USA

²⁷Stanford University, Stanford, CA 94305, USA

²⁸Syracuse University, Syracuse, NY 13244, USA

²⁹The Pennsylvania State University, University Park, PA 16802, USA

³⁰The University of Texas at Brownsville and Texas Southmost College, Brownsville, TX 78520, USA

³¹Trinity University, San Antonio, TX 78212, USA

³²Universität Hannover, D-30167 Hannover, Germany

³³Universitat de les Illes Balears, E-07122 Palma de Mallorca, Spain

³⁴University of Birmingham, Birmingham, B15 2TT, United Kingdom

³⁵University of Florida, Gainesville, FL 32611, USA

³⁶University of Glasgow, Glasgow, G12 8QQ, United Kingdom

³⁷University of Maryland, College Park, MD 20742 USA

³⁸University of Michigan, Ann Arbor, MI 48109, USA

³⁹University of Oregon, Eugene, OR 97403, USA

⁴⁰University of Rochester, Rochester, NY 14627, USA

⁴¹University of Wisconsin-Milwaukee, Milwaukee, WI 53201, USA

⁴²Vassar College, Poughkeepsie, NY 12604

⁴³Washington State University, Pullman, WA 99164, USA

(Dated: September 7, 2005)

This author list contains all authors and institution names for the S2 papers. Please check and send suggestions or corrections to Peter Saulson, LSC Spokesman (saulson@physics.syr.edu), copying the LIGO Laboratory Deputy Director Stan Whitcomb, ([stan@ligo.caltech.edu](mailto:(stan@ligo.caltech.edu)). The following paragraph should serve as a starting point for acknowledging the support LSC has received.

The authors gratefully acknowledge the support of the United States National Science Foundation for the construction and operation of the LIGO Laboratory and the Particle Physics and Astronomy Research Council of the United Kingdom, the Max-Planck-Society and the State of Niedersachsen/Germany for support of the construction and operation of the GEO600 detector. The authors also gratefully acknowledge the support of the research by these agencies and by the

Australian Research Council, the Natural Sciences and Engineering Research Council of Canada, the Council of Scientific and Industrial Research of India, the Department of Science and Technology of India, the Spanish Ministerio de Educacion y Ciencia, the John Simon Guggenheim Foundation, the Leverhulme Trust, the David and Lucile Packard Foundation, the Research Corporation, and the Alfred P. Sloan Foundation.

PACS numbers:

^aCurrently at Stanford Linear Accelerator Center

^bCurrently at Jet Propulsion Laboratory

^cPermanent Address: HP Laboratories

^dCurrently at Rutherford Appleton Laboratory

^eCurrently at University of California, Los Angeles

^fCurrently at Hofstra University

^gCurrently at Charles Sturt University, Australia

^hCurrently at Keck Graduate Institute

ⁱCurrently at National Science Foundation

^jCurrently at University of Sheffield

^kCurrently at Ball Aerospace Corporation

^lCurrently at European Gravitational Observatory

^mCurrently at Intel Corp.

ⁿCurrently at University of Tours, France

^oCurrently at Lightconnect Inc.

^pCurrently at W.M. Keck Observatory

^qCurrently at ESA Science and Technology Center

^rCurrently at Raytheon Corporation

^sCurrently at New Mexico Institute of Mining and Technology / Magdalena Ridge Observatory Interferometer

^tCurrently at Mission Research Corporation

^uCurrently at Harvard University

^vCurrently at Lockheed-Martin Corporation

^wPermanent Address: University of Tokyo, Institute for Cosmic Ray Research

^xPermanent Address: University College Dublin

^yCurrently at University of Alaska Anchorage

^zCurrently at Research Electro-Optics Inc.

^{aa}Currently at Institute of Advanced Physics, Baton Rouge, LA

^{bb}Currently at Thirty Meter Telescope Project at Caltech

^{cc}Currently at European Commission, DG Research, Brussels, Belgium

^{dd}Currently at University of Chicago

^{ee}Currently at LightBit Corporation

^{ff}Permanent Address: IBM Canada Ltd.

^{gg}Currently at The University of Tokyo

^{hh}Currently at University of Delaware

ⁱⁱPermanent Address: Jet Propulsion Laboratory

^{jj}Currently at Shanghai Astronomical Observatory

^{kk}Currently at Laser Zentrum Hannover