

# THE ARCHIVES OF THE CALIFORNIA INSTITUTE OF TECHNOLOGY

## THE PAPERS OF GERRY NEUGEBAUER

Unit Date: 1954-1998 Subject area: Astrophysics

Extent: 10 linear feet

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Processed by: Kevin C. Knox

## THE PAPERS OF GERRY NEUGEBAUER

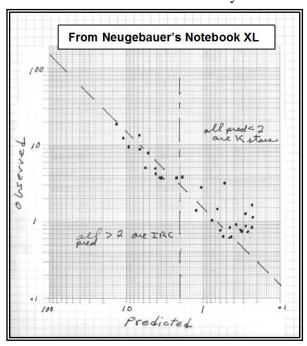
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## THE PAPERS OF GERRY NEUGEBAUER

#### BIOGRAPHICAL SKETCH

DR. GERRY NEUGEBAUER was born in Göttingen, Germany, in 1932, the son of Otto Neugebauer. After moving to the United States he received his AB degree from Cornell University in 1954 and his PhD in physics from Caltech in 1960. He joined the Caltech faculty in 1962 as an assistant professor, becoming a full professor of physics in 1970. He served as the director of the Palomar Observatory from 1980, and he was named Howard Hughes Professor in 1985. Currently Dr. Neugebauer is the Emeritus Robert Andrews Millikan Professor of Physics.



Neugebauer is internationally recognized as a pioneer in infrared astronomy, and has played a leading role in infrared studies of the planets. In addition—and largely through his activities with the Infrared Astronomical Satellite (IRAS) and the Infrared Processing and Analysis Center (IRAS)—he has led both ground- and space-based infrared studies of the stars, the Milky Way and other galaxies.

Observations by him and his colleagues at Mount Wilson and Palomar observatories have revealed hundreds of

new infrared sources in the sky, and afforded the first infrared view of the galactic center. He also played a major role in the design and construction of the W. M. Keck Observatory in Hawaii.

Among Neugebauer's numerous awards are two NASA Exceptional Scientific Achievement Medals (1972, 1984), the 1985 Space Science Award of the American Institute of Aeronautics and Astronautics, and the 1985 Richmyer Lecture Award. He was named California Scientist of the Year for 1986 by the Californian Museum of Science and Industry, and he has been elected to the National Academy of the Sciences, the American Philosophical Society, the American Academy of Arts and Sciences and the Royal Astronomical Society.

#### SCOPE AND CONTENT OF THE COLLECTION

GERRY NEUGEBAUER donated his papers to the Archives at the California Institute of Technology in April, 2002. Comprising 21 boxes and approximately ten linear feet, the collection includes early coursework, research material, technical designs and administrative correspondence and documents. The first series, Neugebauer's astronomical notebooks, encompasses eighty per cent of the collection and covers his astronomical work from the mid nineteen-sixties to the early nineties. The subject matter is diverse, ranging from technical designs to notes from meetings. Series II also includes diverse material. Within the series are numerous documents related to the operations and maintenance of Palomar's 60 and 200 inch telescopes, reports from the construction of the W.M. Keck Observatory in Hawaii, hundreds of photographic slides, graduate course notes and reports on the controversy concerning the construction of LIGO.

#### **OTHER COLLECTIONS**

There are a number of collections in the Caltech Archives related to Gerry Neugebauer and his diverse activities that researchers may wish to consult. For further material on the Palomar Observatory see also the collection of "Palomar papers". For more information on the Keck Observatory researchers may wish to consult the "Papers of the Keck telescope," as well as the collection of oral histories devoted to the subject. For the Laser Interferometer Gravitational-Wave Observatory (LIGO) project, there are, for example, the "Documents of the Drever-LIGO controversy" and the oral history of Kip Thorne, although both of these objects have restricted access.

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From Neugebauer's Notebook XL

Kevin C. Knox

May 2002

## SERIES I: NOTEBOOKS: TECHNICAL AND MISCELLANEOUS NOTES

#### Box 1

notebook no.	inclusive dates
I	9 Jul 1964 – 11 Sep 1966
II	12 Sep 1966 – 20 Mar 1968
III	21 Mar 1968 – 10 Mar 1969
IV	10 Mar 1969 – 1 Jun 1970
V	1 Jun 1970 – 1 Nov 1971
VI	1 Nov 1971 – 8 May 1973
VII	8 May 1973 – 24 Apr 1974

#### Box 2

notebook no.	inclusive dates
VIII	24 Apr 1974 – 28 Dec 1974
IX	1 Jan 1975 – 21 Jul 1975
X	21 Jul 1975 – 2 Mar 1976
XI	3 Mar 1976 – 28 Aug 1976
XII	29 Aug 1976 – 18 Feb 1977
XIII	20 Feb 1977 – 6 Jul 1977

7 Jul 1977 – 3 Nov 1977

#### Box 3

XIV

notebook no.	inclusive dates
XV	4 Nov 1977 – 9 Feb 1978
XVI	9 Feb 1978 – 11 Aug 1978
XVII	13 Aug 1978 – 26 Jan 1979
XVIII	27 Jan 1979 – 13 Jun 1979
XIX	13 Jun 1979 – 1 Nov 1979
XX	1 Nov 1979 – 1 Feb 1980
XXI	1 Feb 1980 – 22 Apr 1980

#### Box 4

notebook no. inclusive dates

XXII 23 Apr 1980 – 23 Jul 1980 XXIII 23 Jul 1980 – 19 Sep 1980

XXIV 20 Sep 1980 – 19 Jan 1981 (IRAS – Infrared Astronomical Satellite)

XXV 20 Sep 1980 – 20 Feb 1981

XXVI 20 Jan 1981 – 26 May 1981 (IRAS)

XXVII 21 Feb 1981 – 14 Jul 1981

XXVIII 27 May 1981 – 21 Aug 1981 (IRAS)

#### Box 5

notebook no. inclusive dates

XXIX 14 Jul 1981 – 30 Dec 1981

XXX 21 Aug 1981 – 5 Dec 1981 (IRAS) XXXI 5 Dec 1981 – 6 Apr 1982 (IRAS)

XXXII 1 Jan 1982 – 16 Jun 1982

XXXIII 6 Apr 1982 – 20 Aug 1982 (IRAS)

XXXIV 16 Jun 1982 – 1 Nov 1982

XXXV 23 Aug 1982 – 12 Nov 1982 (IRAS)

#### Box 6

notebook no. inclusive dates

XXXVI 1 Nov 1982 – 29 Dec 1983

XXXVII 14 Nov 1982 – 13 Jan 1983 (IRAS) XXXVIII 14 Jan 1983 – 15 Feb 1983 (IRAS) XXXIX 15 Feb 1983 – 18 Mar 1983 (IRAS) XL 19 Mar 1983 – 23 Apr 1983 (IRAS)

#### Box 7

notebook no. inclusive dates

XLI 24 Apr 1983 – 16 Jun 1983 (IRAS) XLII 17 Jun 1983 – 27 Aug 1983 (IRAS) XLIII 27 Aug 1983 – 15 Nov 1983 (IRAS) XLIV 15 Nov 1983 – 29 Feb 1984 (IRAS)

XLV 30 Dec 1983 – 27 Apr 1984

#### Box 8

notebook no. inclusive dates

XLVI 1 Mar 1984 – 6 Aug 1984 (IRAS)

XLVII 27 Apr 1984 – 4 Oct 1984

XLVIII 6 Aug 1984 – 26 Mar 1985 (IRAS)

XLVIX 10 Oct 1984 – 17 Jan 1985 L 15 Jan 1985 – 14 Jun 1985

LI 27 Mar 1985 – 1 Jan 1986 (IRAS)

#### Box 9

notebook no. inclusive dates

LII 15 Jun 1985 – 12 Nov 1985 LIII 13 Nov 1985 – 10 Mar 1985 LIV 3 Jan 1986 – 3 Dec 1986 (IRAS) LV 11 Mar 1986 – 13 Jul 1986 LVI 14 Jul 1986 – 4 Nov 1986 LVI 4 Nov 1986 – 23 Mar 1987

#### **Box 10**

notebook no. inclusive dates

LVIII 23 Mar 1987 – 17 Jun 1987 LIX 17 Jun 1987 – 20 Oct 1987 LX 21 Oct 1987 – 16 Dec 1987 LXI 16 Dec 1987 – 17 Feb 1988

LXII 17 Feb 1988 – 22 Apr 1988 [note: mislabeled "22 Feb"] LXIII 24 Apr 1988 – 15 Aug 1988 [note: mislabeled "24 Feb"]

#### **Box 11**

notebook no. inclusive dates

LXIV 15 Aug 1988 – 4 Oct 1988 LXV 4 Oct 1988 – 1 Dec 1988 LXVI 1 Dec 1988 – 6 Feb 1989 LXVII 6 Feb 1989 – 29 Mar 1989 LXVIII 29 Mar 1989 – 6 Jun 1989 LXIX 8 Jun 1989 – 24 Aug 1989

#### **Box 12**

notebook no. inclusive dates

LXX 24 Aug 1989 – 12 Nov 1989 LXXI 13 Nov 1989 – 23 Jan 1990 LXXII 24 Jan 1990 – 27 Mar 1990 LXXIII 27 Mar 1990 – 27 May 1990 LXXIV 29 May 1990 – 26 Jul 1990 LXXV 27 Jul 1990 – 22 Oct 1990

#### **Box 13**

notebook no. inclusive dates

LXXVI 22 Oct 1990 – 11 Dec 1990 LXXVII 11 Dec 1990 – 25 Jan 1991 LXXVIII 25 Jan 1991 – 5 Mar 1991 LXXIX 5 Mar 1991 – 16 Apr 1991 LXXX 16 Apr 1991 – 5 Jun 1991 LXXXI 6 Jun 1991 – 9 Aug 1991 LXXXII 9 Aug 1991 – 4 Nov 1991

#### **Box 14**

notebook no. inclusive dates

LXXXIII 4 Nov 1991 – 28 Jan 1992 LXXXIV 28 Jan 1992 – 7 Apr 1992 LXXXV 7 Apr 1992 – 5 Jun 1992 LXXXVI 5 Jun 1992 – 16 Jul 1992 LXXXVII 16 Jul 1992 – 31 Aug 1992 LXXXVIII 1 Sep 1992 – 16 Oct 1992

#### **Box 15**

notebook no. inclusive dates

LXXXIX 16 Oct 1992 – 19 Nov 1992 XC 20 Nov 1992 – 9 Jan 1993 XCI 9 Jan 1993 – 29 Jan 1993 XCII 29 Jan 1993 – 25 Feb 1993 XCII 25 Feb 1993 – 23 Mar 1993 XCIV 24 Mar 1993 – 3 May 1993

#### **Box 16**

notebook no. inclusive dates

XCV 3 May 1993 – 3 Jun 1993 XCVI 3 Jun 1993 – 15 Jul 1993 XCVII 15 Jul 1993 – 9 Sep 1993 XCVIII 9 Sep 1993 – 22 Oct 1993 XCIX 22 Oct 1993 – 26 Jan 1994

#### **Box 17**

notebook no. inclusive dates

C 26 Jan 1994 – 22 Feb 1994 CI 23 Mar 1994 – 6 Jul 1995 CII 7 Aug 1995 – 19 Sep 1996 CIII 19 Sep 1996 – 13 Aug 1998

#### SERIES II: OTHER PAPERS AND MATERIAL

#### A. PALOMAR OBSERVATORY

#### **Box 18**

### 200 inch telescope

Documents and correspondence

18.1	1987
18.2	1988
18.3	1989
18.4	1990
18.5	1991
18.6	1992
18.7	1993
18.8	1994

### 60 inch telescope

Documents and correspondence

18.9 1965-80 18.10 1989

18.11	1990
18.12	1991
18.13	1992
	B. KECK OBSERVATORY
<b>Box 18</b> <i>cont</i> . 18.14	Keck Observatory: reports 1989-90
	C. PHOTOGRAPHIC SLIDES
Box 19	
19.1	Miscellaneous astronomical images, graphs and observatories c. 1970-90
	D. Course notebooks
Box 20	
20.1	Physics 205: Quantum Mechanics 1954
20.2	Astronomy 131: Astrophysics 1954
20.3	Physics 131a; Physics 2a; Physics 2b 1954-57
20.4	Physics 205: Quantum Electrodynamics 1955
Box 21	
21.1	Astronomy 132: Stellar Interiors 1955-56
21.2	Physics 102 no date
	E. THE DREVER-LIGO CONTROVERSY
Box 21 cont.	
	The Drever-LIGO Controversy (Note: closed until May 2015) 1994
21.3	Part One – Response to AFTC
21.4	Part Two – Response to DGD

Part Three – Arbitration Process

21.5