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15/3/24 College of Liberal Arts and Sciences Astronomy Department Larry Smarr Papers, 1956-2000

### Box 1:

# **Biographical**

Vita and Bibliography 1 Page Biography 2 Page Biography Curriculum Vitae, 1984-93 (9 folders) Smarr Glossy Photos, 1990 Group Photograph, ca. 1970-80

### **Education and Early Career**

St. Louis Field Theory Meetings, 1969-70
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Difference Equations (Notes from University of Missouri Seminar), 1972
Harvard Physics, 1972-76
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Texas Ph.D Program, 1974
Astrophysics Department-Princeton, 1974-75
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Center for Astrophysics, 1976-77
Research Summaries, 1977-79
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Cornell Offer, 1979-80
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### Correspondence

Correspondence, 1973-77, 2000 (5 folders)
Abelson, Phillip, 1982
Adler Planetarium, 1985
Alpert, Dan
Interdisciplinary Research Center, 1989
Industrial Park
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Bahcall, John
Grump-o-gram, 1990
Illustrations of the Panel Work for ASC, 1990

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Letter from Dr. Volk, 1990 Panel, 1989 E-Mail, 1989 Report Contribution, 1990 Committee on Computing and Data Processing, 1990 Decade Survey Info, 1990 Baker, Garth Baker, Gerald, 1977-78 Beichmann, Charles, 1989 Berdahl, Robert Berlow, Paula, 1983 Bioinformatics Connection and Hire, 1999 Biosym Technologies, 1991 Boeing, 1989 Bovyn, Marc Letters of Reccomendation, 1982 Visit, 1982 Boyd, Christopher, 1998 BBC, 1979 Brewyn, L.C., 1984 Bruno, Theresa, 1982 Bullard, Clarke, 1984 Busey Bank, 1985 Cades, Andre, 1984 California Institute of Technology Caderni, Nicolo, 1979 Carr, Bernard, 1979 Centrella, Joan 1980-82 Reccomendations, 1982 LLL Talk, 1982 CIC, 1996 Champaign County Computer Club, 1989 Choptuik, Matt Clark, Paul, 1978-79 Cole, Carl, 1989 Coop Agreement, 1989 Crutcher, Richard, 1990 Cunningham, Scott, 1984 Davidson, Kay, UIUC News Bureau, 1985 DeFacio, Brian, 1972, 1981 (2 folders) DeWitt, Bruce, 1971-72 Diederich, Paul, 1974

**Drexel Letters** Dudley, Scott, 1983 Dyson, Freeman, 1980 Eardley, Doug, 1975-76 (2 folders) Duncan, Comer, 1979, 1986 (2 folders) Emigh, Dave, 1983 Epperly, Ken, 1974-76 Evans, Charles, 1983, 1985 (2 folders) Box 2: Evans, Myron, 1984 EPS Machine, 1985 Expertise in Resource Scheduling, 1999 Fall, Mike, 1978 Family, 1975 Farber, Dave Fashion, 1977 Faulkner, Larry, 2000 Fermilab, 1984 Fradkin, Eduardo, 1986 Fratkin Associates, 1995 Fitzgerald, Peter, 1999 Foreigner Astronomers, 1990 Ford, Roxanne, 2000 Foster, Ian, 1997-98 (2 folders) Georgia Tech, 1996 (2 folders) Hammond, Alan, 1985 Hawley, John 1984 Cambridge/Les Halles/Munich, 1982 Letters of Recommendation, 1983 BH Thick Disks, 1985 Space Disks, 1983 Helfand, David Hess, Karl, 1995 Hirsh, Richard, 1993 Hughston, Lane, 1972-78, 1984 (2 folders) Human Exploration Initiative, 1989 Iowa, 1996 Intel Agreement, 1998 International Ultraviolet Explorer Observing Program (NASA), 1983 (2 folders) Invitations, 2000

Jets Correspondence, 1981-82

Jantzen, Bob, 1972

Joseph, Al

Katsaros, Dean, 1997

Katai, Tatao, 1984

Kates, Ron, 1980

Kaufman, Bill, 1984

Kazanas, Demos, 1982

Kippenhahn, Rudolph, 1984

Kirkland, Florida State

Kraft, Robert, 1989

Kuchar, Korel, 1971, 1972 (2 folders)

Langenburg, Donald (NSF), 1982

Letters for LS, 2000

Letters to Answer, 1983

Linsky, Jeff

Archiving Policy, 1990

Draft on Archiving, 1990

**Untitled Comments** 

LeBlanc Interface Calculator

Los Alamos, 1983, 1988 (2 folders)

Loushin, Robert, 1984

Lucky, Bob, 1991

Mailing Lists, 1978-83

Matzner, Richard, 1989

Max, Claire, 1989

May, Mike, 1983

Melott, Adrian, 1984

Neutrino Pancakes

Mihalas, Dmitri, 1983-84, 1989 (2 folders)

Mississippi State University

Miller Galaxy, 1982

Motorola, 1984

NASA, 1989

NSF Institute, 1977

Netmeeting vs. Networking, 1996

NT/Graphics, 1998

Networking Renewal, 1996

Network Access Points and Grids, 1999

Nori, Franco, 1985

Norman, Mike, 1980, 1984, 1990 (3 folders)

Olsen, Gary, 1989

Pascolini, Alessandra, 1984

Pavells, Richard, 1978 Pamofsky, Wolfgang, 1982 Pea, Roy, 1992 People, 1984 Perley, Richard, 1989 Piran, Tsvi, 1984 Planetary-Scale Bird Migration, 1999 Plemmons, R.J., 1985 Popular Astro Stuff (Fan Mail), 1980 Press, Bill, 1989 Trial Balloon, 1990 E-Mail To Do, 1990 Public TV, 1980 Radio Mailing List, 1982 Quanta, Inc. Reddy, Frank, 1982 Reed College, Macintosh Project, 1985 Russel, C.T., 1989 Sarnoff, Lolo, 1979 Saulson, Peter, 1984 Science Writing, 1986 Schatzman, 1983 Shapiro, Stu, 1982 Signore, M., 1982 Seeds, Michael, 1989 Sequent Computer Vendors Shalf, John, 1999 SIO, 1996 Sky and Telescope Magazine, 1990 Smith, Phil, 1996 Stanford-Yau, 1979-80 Science and Technology Centers (STCs), 1998 Stukel, James–Larry Smarr Farewell Letter, 2000 Sommers, Paul, 1973-77 (2 folders) Strange Letters, 1975 Stumbles, Sian, 1979 Sumi, Dean Recommendation, 1985 On Pits Taubes, Cliff, 1978 Tel, Peter, 1982 Tenher, Ed, 1981

Thank You and Congratulations Letters, 1997-98

Thank You Letters to L. Smarr, 1998

Thorne, Kip, 1981

Tremaine, S., 1990

Tyson, J.A., ca. 1989

United Technologies, 1985

University Correspondence, 1984

University of Utah, 1994

Urani, John, 1984 (2 folders)

Vineyard, George H., Distinguished Professorship Fund, 1990

Vaucouleurs, Gerald, 1981

Visual Supercomputing, 1996

Vorhees, B., 1975

Wacker, Paul, 1998

Walker, Martin, 1975

Wheless, Glen, 1995

Weadon, Donald, 1982-83

Wheeler, John, 1977

White, S., 1989

Wiita, Paul, 1976

Williams, Ruth, 1980

Wilson, J. 1980

Wilson, Ken, 1983

Windhoss, 1990

Winkler, K.H. 1982

E-Mail

Wirth, Alan, 1984

Letters of Reccomendation, 1984

Wolff, Robert, 1973, 1981, 1994 (3 folders)

Woosley, S., 1990

York, J.W., 1973-77, 1984 (3 folders)

# Box 3:

# **Associations and Professional Involvement**

American Association for the Advancement of Science

Editorial Board Meetings, 1987, 1988 (2 folders)

Invitations

American Astronomical Society (AAS)

1982-84 (2 folders)

Bulletin of the American Astronomical Society (BAAS), 1982-85 (4 folders) Meeting, 1984 Chicago Meeting, 1975

Hawaii Meeting, 1977

Mexico City Meeting, 1979

Tucson, Arizona, 1985

AAS1/AAS2/NASA/NASA2 Outlines, c. 1990

American Physical Society, 1982-93

Astrophysics Division, 1983-84

Washington Meeting, April 1973 and Chicago Meeting, February 1974

Association of Universities for Research in Astronomy, 1981

Kitt's Peak National Observatory Newsletters, 1982-83

Harvard Club of Chicago, 1982

Harvard Society of Fellows, 1977-79, 1982 (2 folders)

International Society for General Relativity and Gravitation, 1977-78

Journal of Computational Physics, 1980

National Optical Astronomy Observatories, 1990

National Radio Astronomy Observatory

VLA Observing Proposals, 1985

Radio Panel, 1990

National Research Council, 1989

Astronomy and Astrophysics Survey Committee (AASC)

1989, 1990 (2 folders)

Draft Policy Statement on Astronomical Data, 1990

Panel on Computing Data Policy, 1989, 1990 (6 folders)

Tentative Ballot for Irvine Meeting, 1990

Report of the Subcommittee for Theory, Experimental, and Laboratory

Astrophysics, 1989

Commission on Physical Sciences, Mathematics, and Resources, 1989-90 (2 folders)

NASA Research Institute for Advanced Computer Science, 1989

National Science Foundation

Subcommittee on Ground-Based Optical and IR Astronomy, 1989

Science Editorial Board, 1988

# Conferences, Trips, and Talks

Cal Tech Gravity Conference, 1970

European Conferences, 1971

International Conference on Gravitation and Relativity:

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Talks Given, 1972-76

International School of Physics at Varenna, 1972

Les Houches, "Les Astres Noirs", 1972

Texas Symposium on Relative Astronomy, 1972, 1974, 1980, 1982 (5 folders)

### Box 4:

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Popular Physics Talk, 1974

Symposium on Theoretical Principles in Astrophysics and Relativity, Chicago, 1975

Stevens Relativity Conference, Philadephia, 1975

Minisymposium on the Early Evolution of the Universe, Chapel Hill, 1975

Washington-Waterloo Trip, 1975

Conference on Explosive Nucleosynthesis, 1976

Hawaii-Livermore Trip, 1976

Travel Reimbursements 1976-78

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Kinematics Talk, 1977

Chicago-Texas Trip, 1977

Summer Travel Plans, 1977

Workshop on the Dynamical Construction of Spacetime, Yale University, 1977

Iowa State-Missouri Trip, 1977

Cornell Trip, March 1977

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Aspen Center for Physics Summer Program, 1979, 1981 (2 folders)

Forty Years of Stellar Energy Theory, Stony Brook, 1979

Workshop on Computational Astrophysics, Ames Research Center, 1980

Supernovae, Stellar Collapse, and Neutron Star Formation, Santa Barbara, 1980

Minneapolis-Austin Trip, 1980

Committee on Space Research Symposium, Cambridge, 1980 (2 folders)

Summer Colloquium, UIUC Department of Astronomy, 1980

Colloquium, North Carolina State University at Raleigh, 1980

Copenhagen-Munich-Italy, 1981

Harvard Trip, 1981

Allerton Conference, 1981

Harlow Shapley Visiting Lecture, 1981-84

DePauw Visit, 1984

International Astrophysical Union Symposium on Extragalactic Radio Sources, Livermore, CA, 1981 (2 folders)

Astrophysical Radiation Hydrodynamics Workshop, Munich, 1982

Purdue University, 1982

Miami University Trip, 1982

Smithsonian, May 1982

Italy, 1982

Numerical Astrophysics: A Meeting in Honor of Jim Wilson, UIUC, 1982

General Relativity and Gravitation Conference, Venice, 1982-84

Talks in Other Sessions, 1983

My Session

July 1983

China Meeting, 1982

Los Alamos Workshop on Magnetosphere Phenomena in Astrophysics, 1982-84 (4 folders)

Highlights of Modern Astrophysics, Cornell University, 1984

Greygynog Relativity Workshop, University of Wales, 1984

Workshop on Gravitational Waves and Axions, Santa Barbara, 1984

IBM Talk, 1984

Free Zone Authority Meeting, 1985

Boeing Summer Institute, 1985

Summer School: Methods in Statistical Reports, Monte Carlo, 1985

Stockholm, 1985

Astrotech 21, 1990

Bulleted Talk, 1990

Creon San Jose Trip, 1991

Chamber of Commerce Speech, 1998

Invitation to HPCAsia, 1998

Visit to Caves and EVL, 1999

Talk Refusals, 1999

Smarr Talk PowerPoint Slides

Frontiers of Astrophysics Talk Handwritten Notes

#### Research

Curvature Split, Congruences, etc., 1963-74

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Linearized Gravity Wave, 1966-78

Null Decomposition of ST, 1967-71

Newman-Penrose Formalism, ca. 1968

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### Box 6:

Salt Fingers, 1974 Binary Pulsars, 1974-77 (2 folders) Super Massive Stars, 1974 Swenson Research, 1974 Grav Wave and Neutrono Astro, 1974 Supermassive Black Holes and Galactic Center, 1975 Compact Radio Sources, 1975 General Galactic Nucleus, 1975-76 Pulsar Magnetosphere Papers, 1976-80 Ostriker-Smarr-Thuan Spheroid Project, 1976 Saul Linearized Wave, 1976-78 Grav Wave Mission, 1977-79 Schwarzschild Parts Project, 1977 Lin-Smarr Spherical Pressure 1977 Rotating Stellar Core Collapse, 1977 Nonlinear Wave Equations, ca. 1977 Galactic Center Infrared Sources, 1977-78 Linearized Project, 1978 Black Hole Models for Galactic Nucleus, 1978 Spherical Hydro Core Research Notebook, 1978 Raleigh-Taylor Problem 2D Core Overturn, 1979 Gravity Wave Detection by Doppler Probes, 1979

G-Metric, 1979 Rotation and Circulation, 1979 Cosmology, 1980 Quasar-Jets, 1980 File Directory of NBI Diskettes, 1980-83 Survey Field Celcos, 1980 The Cocoon Project, 1981 Teulosky Article, 1981 Doppler Ranging Project, 1981-82 Box 7: Supernovae, 1981 Cal Tech Jet Project Hot Spot Draft, 1981-83 Observation and Torino Plates Transparencies Xeroxes **Contour Plots** Jet Project, 1983 Cooling Core Perturbation, 1982 Einstein Equations Project with Bovyn, 1982 Allan Wirth Observing MMT, 1982 DBs Mail List, 1982 3C278 Project, ca. 1982 Optical Radio, Overlay Project Black Holes and Literature, 1982 M87, 1982-87 Radio Galaxy, 1982 Abells Clusters, 1983 Supercomputing Center Cal Tech Computing Proposal, 1983-85 Conversations with Insiders, 1983-84 Battle, 1983 Research, 1983-84 (7 folders) Proposal, 1984 (2 folders) Congress, 1984 Cray Agreement, 1984 Personal Work Station and Array Processors, 1984 ETA Negotiations, 1984 Office of Advanced Science Computing Program, 1984 Bibliographies and Related Materials, 1985 Sources of Grav Radar, 1984

Microfilms from C. Evans, 1984

Hawley-Smarr Papers, ca. 1984

Accretion Notes, 1984

Numerical Study of Black Hole Accretion III, 1984

Hawley Copenhagen Paper, 1985

C.R. Evans Notes, 1985

Worlton Supercomputing Past to Future, 1985

Semiconductor Research, 1985

Astro, ca. 1990

VLA Proposal on CDs and WAT-Owen and Burns

Bio Workbench

L. Smarr Notes (2 folders)

Boro

2BH–Color Photos

LeBlanc-Wilson Calculations

**Graphic Printout Original** 

Axions and Supernovae

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### Box 8:

Microfiches of Astronomical Plots, 1983-84

**Drexel Film Paper Negatives** 

Brill N-1 Numbers Film Negatives, 1984

27.5 cm Memorex Quantum 6250 BPI SuperReel Computer Tape, Titled "CRE34", Dated "5/11" 27.5 cm Memorex MRX IV 6250 BPI SuperReel Computer Tape Titled "CRE02", Dated 12/14

Time 15:32

### Box 9:

### **M31 Research**

Globular Clusters, Planetaries, 1956-78 Digitized Place Material and Overlap, 1975

Optical, Ir., UV, 1977

Galactic Center X-Ray Sources, 1978

Smarr Notes and Graphs, 1979

Written Summaries, 1979

Stellar Composition, 1979

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Einstein Data, 1980

X-Ray Plots-Smarr, 1980

X-Ray Observations, 1980

Blind Magnitudes, 1980

Glob Cluster 32, 1980

256 Center Fields, T2038, 1980

T2037 Geometrical Corrected, 1980

512 Center Fields, 1980

Standard Fields, 1980

Color and Magnitudes, 1980 (2 folders)

Stellar Plots, 1980

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CFA Notes, c. 1980

Observing Log, 1980

M31-I, 1981

VLA Observations, 1981

Optical FITS Tape Content, 1981

Central Fields, c. 1981

Radio Continuum, 1981

X-Ray Globular Clusters, 1981

X-Ray Foreground Stars

Duplicate Celcos, TP 148-170, 1981

Bulge X-Ray Sources Paper, c. 1981

Bulge Falloff, c. 1981

Celcos at 148-170-Best on M31, c. 1981

Extended Radio Source in Center of M31, 1981

Survey Field Tables, c. 1981

Missing Globs Paper, c. 1981

Optical Position Lists-Video Camera Fields, 1981

Data Reduction-With Notes, c. 1981

Data Reduction-KPNO Random Computer Output, 1981

Van Bruegel Ionized Gas, 1981

Research, c. 1981

Standard Fields, 1981

Leon Tables, 1982

Survey Fields, 1982

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### Box 10:

# **University of Illinois Subject File**

Advisory Committee Members, 1991-93 1992 Alpert, Daniel Center for Advanced Study, 1980-82 Appointment, 1990 Anti-Jason Summer Program, 1990 apE Working Group, 1990 **Appointment Documents** Original Application and Negotiations, 1979 Promotion, 1980-83 Salary, 1981-83 Job Openings, 1981-82 Salary Letter, Spring 1984 Letters of Recommendation for L.Smarr to Full Professor, 1984 Supercomputing Appointment Negotiations, 1984 **Argonne National Laboratory** Badge Policy Issues, 2000 **Astronomy Department** Head Search Committee, 1985 Undergraduate Majors, 1982 Sabbatical Leaves, 1982 Assistant Professor Applicants, 1982 Colloquia-Future Speakers, 1983 Capricious Grading Committee, 1982 **Grad Students** 1979-83 Admission, Fall 1981 Possible Money for Graduate Students **Postdoctoral Positions** Openings, 1982-83 Positions, Winter 1984-85 Recruiting, 1981 Penn State Grad Program, 1983 Ph.D Exams, 1982 Research Application Forms, 1983-84 AT Modem, 1984 Atmospheric Sciences, 1981-82 Beckman Award, 1981 Bell and Howell Microfiche Bell Laboratories, 1985 Budget Reform, 1998 Building an Electronic Scientific Community, 1991 Bulk Time, 1984 **Business Week Expenses** 

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Department of Defense Grant, 1983

Department of Energy Grant, 1979

DOM Meeting Issues, 1988

**Discovery Shuttle Picture** 

Document Server, 1991

Duffy-Mazon NRC, 1991

Digital Library, 1996

Experimental Multiprocessor, 1984

External Security Audit, 1991

Faculty Fellows Applications Data, 1999

Floating Point Systems Array Processor, 1982

### Box 11:

Fratkin Report, 1991

GelReader Acknowledgements, 1991

General Motors

Goldshaw Design and Film

Gartner Group, 1990

Graduate College-Linda Wilson, 1983

Graphs, 1990 (4 folders)

Haves Quantum, 1995

Health of Academic Science and Engineering, 1984

Hirsch Notes, 1991

IAU General Assembly Stuff, 1982

IBM Joint Study

Legal Agreement, 1985

Press Release, 1985

Imaging Processing Software Project, 1981

Impact of State Cut

Shortfall of Funds

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Institute for Theoretical Physics, 1981

Interdisciplinary Program, 1980

Jackson State Proposal, 1980

Job Candidates, 1980

Kahn-Gigabite Testbeds

Kaufman Science Report, 1988

Kitt Peak National Observatory

Observing Proposal, 1984

Proposal to be Submitted, 1982

Kogut and User Balances, 1986

KSR, 1992

Lessons from Challenger, 1987 Library Additions, 1981 Los Alamos Collaborator Agreement, 1983 McRae-Mexico City MacArthurs Fellows Program, 2000 Main Files, 1984 Math Graduation Ceremony, 1989 Millercom, 1980 Macintosh Computers Standards WAN, 1991 XL, 1985 Minnesota, 1992 Media Policy, 1992 Mapping Science Committee, 1981 National Academy of Science, 1985 Complex Computer Simulations and Public Policy, 1991 National Center for Supercomputing Applications 5 Year Renewal Plans Institutional Information, 1991 Media Contacts, 1984 RFOs/Orders Postdoctoral Applications, 1988 Breedan, Joe Petrich, Loren Announcement Bublik, Guillermo Brown, J. David Tai, King-Shen Space, 1998 Staff Hodges, Larry Personnel Issues, 1989 Pending Positions, 1996 Prudhomme, Thomas, Administrative Increment Justification, 1998 Staff Hirings Supercomputing Usage **Across Center Comparisons** Usage, 1990 Using Supercomputing in Engineering Applications: A Bibliography National Security Agency National Center for Atmospheric Research (NCAR), 1984 (2 folders) Plan, 1988 National Institute of Health (NIH) Advisory Committee, 1997

National Science Foundation

Achievements, 1986-89

Budget, 2000

Cooperative Agreement, 1985

Evans Postdoc, 1982

Center Monthly Usage

Site Visit, 1985

NASA Theoretical Astrophysics Grant, 1984

National Radio Astronomy Observatory (NRAO) and Supercomputer, 1985

News Bureau, 1984

Notes, 1996

Nuclear War Hiring Problem, 1985

Observatories

Office of Instructional Resources, 1983

Official Statements, 1989

Others E-mail

Ozone Date, 1991

Program Advisory Commitee (PAC)

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Members, 1990

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Phone Numbers and Addresses, 1981

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Recent Progress in Jet Modeling

Report to UIUC, 1982-84

Research Opportunities in Computational Biology

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Ruzena

Science and Technology Centers, 1986-88

Shuttle Flight, 1984

Signal Processing Branch Acoustic Division, 1990 Smithsonian Institution Article, 1991 Film Project, 1991 **SSD** Society for Information Management, 1990 Source- Get Up On Mac, 1986 Summer Workshop, 1989 SuperQuest Data Support Info, 1983 T-Division Director Search, 1998 **Technical Bulletins** TechKnowledge, 1988 Technology Assessment Board, 1990 **TED 2 Notes** The Termite: Intel's Pentium Pro Strategy for HPC, 1996 Union of Professional Employees, 1982 University Films, 1982 University of Missouri Physics Department, 1982-83 Visitors-Money Sources, 1983 VIP (VAX and Image Processing Center) DOD Astronomy Faculty Input, 1982 Hard Copy Devices, 1982 Digitizer, 1982 Newsletter, 1982 System, 1982 Ridge (VAX), 1983 VLA Proposal to Be Submitted, 1983-84 V4th Project, 1991 Water Resources Building Remodeling, 1985 Weekly Meetings, 1985 What's New Newsletter, 1992 Who's Who in Frontiers of Science and Technology Wrestler Medical Problem, 1989 W.P. Discs, 1983 Wolff, Steve and Irene Wooley Meeting, 1991

### Box 13:

### **NCSA Director's Life**

YMCA Friday Forum, 1981-85

Articles

Australian "New Explorer" Article, 1991-92 (2 folders) Champaign-Urbana Magazine, 1983 Agencies to Review for Refusals Annual Review of Computer, 1988 The Physical Review, 1988 World Science Publication Co, 1988 **Astrophysics** American Astrophysical Society AAS Symposium Program June 1992 American Institute of Physics, 1986 Reply to Draft Outline, 1993 Computers in Physics Article "Visualization Captures the Imagination of Physicists" by L. Smarr November/December 1991 "Physics Today" Corrections, 1990 John Zumerchik, 1990 American Physical Society APS Fellow Status Congratulations, 1989 Astrophysics Cosmology Group, 1988 Consulting Agreements, 1991 Los Alamos National Laboratory OCI & Resume Letter, 1990 External Review Committee, 1988 Lawrence Livermore National Laboratory External Advisory Committee, 1987-88 Serlin Report-Parallel Processing Advisory Panel, 1988 Smarr Consulting Aug. 85-86 Toronto Center for Large Scale Computation, 1987 Disclosure of Non-University Activities & Income 1990-91 1989-90 1987-88 Friends George Carrier, 1986 Lane Hughston, 1986-87 Bill Kaufmann, 1987 Philip Marcus, 1986 Paul Sommers, 1985 Kip Thorne, 1985 Paul J Witta, 1986 Jimmy York, 1988

General Relativity

General Relativity Graphs

```
Demianski-LS Reply
       Shapiro & Teukolsky--fluids & Fields in General Relativity (Review), 1988
       Steve Fulling Recommendation, 1988
      New Relativity Students, 1989
             Steven Robert Brandt (File Opened Sept. 1991)
Grants
       Astronomy Grant, 1985-86
             Master Mailing List, 1983
             Numerical Relativity Workstation
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             October
             September
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      NSF Budget
             NSF Cray Account, 1987
             NSF Grant, 1982-86 (2 folders)
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             NSF Renewal 1985
             Renewal Gravitation, 1986-87
             NSF Proposal Reviews, 1983
             NSF Renewal
                    1985
                    Proposal to Cooperative Agreement--nov. 1988
             Phy8209554, 1984-87
                    Final Project Summary, 1983
                    NSF Renewal Grant, 1982
             Phy 8001496
                    NSF Renewal Grant
                    NSF Renewal Letter
             Accounting
                    HDF Net CDF Award Email, 1992
                    NSF Grant Rules & Procedures
                    Addendum to NSF Important Notice No. 10, 1989
                    NSF Renewal Forms
                    Solicitation, 1983
                    Vouchers
      Sloan Grant, 1985
Proposals
       1993
```

Cosmology GG Proposal

Cost Effective Linkage of Health Providers Using Wireless Personal

Communication Technology

Curriculum Development in Computational Science & Engineering

Kale Proposal

Gravitation Research Program, 1986

Connie Smarr Equipment Grant, 1984

Post Doc Letters & Applications, 1989

# Box 14:

### **Current Students**

David Bernstein, 1988-92

Letters of Recommendation, 1991

Bernstein Thesis-defense 11/11/92

Steven Robert Brandt (File Opened Sept. '91)

David Hobill, 1987-88

Letters of Recommendation, 1988-91

Scott Allyn Morton

Morton Thesis: the Role of Ambipolar Diffusion in the Formation of Interstellar Cloud Cores & Protostars, 1981

Ed Seidel, 1989-91

Numerical Relativity Workbench Email July '92

Appt Papers, 1989

"Computational Relativity" Proposal, 1992

Letters of Recommendation, 1990-92

Seidel Renewal Offer 2/25/91

Visit 2/8-10/89

Paper: "Normal Mode Excitation from Stellar Collapse to a Black Hole:

Odd-parity Perturbations" (Labeled Seidel Black Hole Paper), 1989

Post Doc Application, 1989

John Towns, 1990-91

Collaborators

Letter of Recommendation (Joan Masso), 1993

Letters of Recommendation, 1992

#### Former Students

Andrew Abrahams, 1987-89

Thesis Defense June 21, 1988

Letters of Recommendation, 1990-93

Reprints, 1987

### N. T. Bishop

The Event Horizon of Two Schwarzschild Black Holes, 1987

Joan Centrella, 1986

Scott Dudley, 1987 Doug Eardley, 1985-87 Kenneth Robert Eppley-PhD Thesis Chuck Evans, 1985-88 Evans Letter, 1988-89 Evans Sloan Request, 1989-90 Sloan Fellowship/letter of Recommendation, 1988 John C. Hart Letters of Recommendation, 1992-93 John Hawley Letters of Recommendation, 1986-92 Sloan & PYI Awards, 1986-92 Hawley Papers, 1992 Bob Loushin, 1985 Dean Sumi, 1985-88 Upson-Norman Sumi Proposal, 1986 NRC (National Research Council) Application, 1988 Graduate Student Support Joel Rauber, 1988 Rejected Applicants Xueyu Xiang, 1989 Various 1986 July 11th International Conference Other Proposals The Computational Science Revolution, Technology, Methodology, & Sociology, 1986 Numerical Relativity, 1986-87 Jim Wilson, 1988 Festschrift, 1982-83 Conference Relativity Papers (LS and D Hobill) Smarr's Christmas Cards, 1986 **HPCC** Panel List of Participants, 1992 National Academy of Science Convocation, 1993 Joseph Smarr NRC Presentation 5/10/93 Papers to Write, 1985 Colliding White Dwarf Paper (Iben, Evans, Smarr), 1987 Coover Agency, 1986 Copyright Permission, 1986

Freeman, W H Article, 1987 Kaufmann Book, 1992

U S Information Agency Article, 1986

Papers to Review

Refused, 1985-89

Black Holes

Reviewed Papers

"High-performance Computing: How to Stop Fearing & Start Lovin the Parallel Computer" by Tom Alexander, 1991

Johnathan Thornburg Thesis, University of British Columbia, 1989-93

IEEE Spectrum Magazine Special Series on Environment, 1993

### Personal Items

American Physical Society Fellow, 1988

Award Nomination - Fahrney Medal, 1989

Burlington-Northern Nominee, 1986-87

DPMA Nomination, 1988

Federal Computer Week's Federal 100 of 1993 Award

Franklin Institute Medal, 1990

Guggenheim Fellowship, 1985

Harvard Society of Fellows, 1991

Society of Fellows Directory Update--1991

Home Workstation

### Box 15:

Italy Outline

Louisiana State University Chair Nomination, 1987

Medal of Technology Nomination, 1986-87

Mail Messages, 1986

Professorial Promotion, 1984

Thank You Letters

AAAS Symposium, 1991

Gatekeeper's Workshop, 1990

Institute for Illinois, 1989

Thani, John, 1984

World Bank, 1989

Tykociner Lecture Committee, 1989

Press for Lecture 4/18/89

**UIUC Physics Department** 

Dean's Form 1989-93 (3 folders)

Activity Report, 1986

Who's Who in America, 1990-94

Who' Who Proofs, 1990-93

Who's Who in the Midwest--approved Entry 11/17/91

Who's Who in Science & Technology, 1986

Who's Who in Tech Today Who's Who in the World, 1986 **Publishers** Cambridge University Press, 1987 Robert Ubell Associates, 1988 Iop Publishing Ltd, 1987-89 Requests for Papers, 1986 Restaurant Joke, 1988 Cartoons, 1988 Science Photos & Write-ups Smarr Ph.D Thesis, 1975 Star Wars (Strategic Defense Initiative), 1986 Fan Mail, 1985-961 Memberships Smithsonian Associates, 1987 **National Committees** AIP Computer Journal Editor Search Voss-AIP Journal Call, 1986 Newman Foundation, 1986 **Publications** Astro & the Arms Race On Star Wars, Software and Complexity ACDIS Bulletin (Sept 1985, 86) SDI Newspaper Articles, 1985 SDI Project-Jon Sauer, 1990 Building Information Infrastructure, 1992 Articles NCAR-41, 1988 Visualization Article, 1988 NAS Op-ed, 1988 New Scientist, 1988 Gr Review Article Articles Refused Brittanica, 1988 Nuclear Winter, Silent Spring, 1986 Seminars, 1986 Talks and Articles Refused 1985 September-Harlow Shapeley Lectureship Program November-Eastern II University (Chem Department) 1986 April-Japanese Conf on Gravitational Collapse June 12-Cray U-p Dinner/tour-Marcel G

October 28-Bryen DOD

November 21-News Media Event

December 10-11-American Soc Mech Eng

December 12-American Society for Trade & Development

1987

January 15-ACM Talk

January 20-21-David Hoffman University of Mass

February 4-5-U of Missouri Seminar

February 8-10-University of MarylandMarra

March 27-URASeminar

June 4-6-University of Mo Computer Expir in Nonlinear Analysis"

April 16- University of Ch Physics Department Coll

June 9-11-Navy Networking Conf

June 11-12-Ethical Conflicts Seminar

June 29-Department of Advertising

August 3-7-Utah

August 4-Grace Hopper

September-China Trip

September 20-23-APS

September 22-Topical Group in Comp Physics (Fernbach)

October 8- Decatur Talk JS

October 21-NPAC Lecture Series Syracuse University

October 22-World Publishers

1988

University of New Mexico Sci & Tech Lecture

January-Springfield Public Schools

April 11-14-Federal Info Processing Council

May 22-Math Graduation Talk

June-co State University Visit

August 1-Picas Mtg

August 1-5-John Risley Cong

September 14-16-Cray Symposium

September 30 or October 1-University of Missouri at Columbia Talk

October 9-Univ of Tx @ Austin Matzner Invite

October 19-20-Columbia University Vernon Ozarow

October 13-14 or 27-28-University of Missouri at Kansas City External Review Board

December 11-16-14th Texas Symposium on Rel Astro

1989

January 14-19-AAAS Mtg

January 27-28-Murray Gell-mann Festschrift @ Caltech

March 11-Sante Fe Inst Science Board

March 21-22-CRI IAM Talk

April 17-20-NCGA

April 26-28-MacWorld Expo

June/July-Hong Kong University Physics Chair Search

September 7-8-Mexico Seminar on Supercomputing Appl

September 14-TGV Gigabaud Workshop

October 2-4-National Communications Forum

1990

April or May-Univ of Tokyo Conference on Supercomputing FY1989

March 12-15-Conf on High Speed Computing

March 27-Supercomputing Japan '90; Peter Magnuson

April 13-Robert Ubell Associates

April 26-10th Speedup Workshop

May 1-Symposium on Renewing Us Mathematics: a Plan for the 1990's

May 22-NCHGZR: Special Review Committee

May 23-25-Astro Tech 21; Jim Weiss

June 1-10th Annual Meeting of Fermilab Industrial Affiliates

June 11-13-Visualization Workshop, Stanford

June 12-15-Scientific Computing & Automation

June 24-26-Commission on Geosciences Woods Hole Meeting

July-School of Music, Hubert Brun

August 17-CMS Visit

Septmber 21-23-CPSMA Retreat

September 24-25-Edinburgh Department of Physics Annual Seminar

September 28-29-IBM Customer Advisory Board Meeting

October 7-National Communicating Forum

October 9-10-Committee on Geosciences Environ & Resources

October 10-12-German Comp Sci Society Meeting

October 19-20-APS Session, Dr Bill Heller

1991

January 31-OTA Meeting

February 10-Harvard

February-Review of Institute of Med Report

April 4-6-Nara Japan Conference

June 10-14-US Open Golf Championship

June 19-sc '91 Conference

July 21-24-US National Congress on Computer Mechanics

1992

Tykociner Lecture Committee (Timothy Trick)

July 27-29-to Sweden

September 24-SERC "Supercomputing-the Way Forward?"

September 27-Lilly Research Lab "Advanced Focus"

November 25-ACM

#### December 3-National School of Med Talk

1993

January 6-presentation to BNAC Meeting Afl-cio

February 27-Director of Institute of Computational Sciences & Informatics

March 5-Invitation to Elctron Microscopy Soc of the Ohio River Valley (Emsorv)
Meeting

March 5-Seminar Series at Osu

April 19-20-AFL-CIO Exec Board Meeting

April 20-U.S.Department of Commerce

April 21-Friday Forum University YMCA

April 28-30-Technology Summit '93, Apple Computer

April-the Physical Review-referred to Ed Seidel

### Box 16:

#### **Publications**

# Correspondence

Physics Reports Article, 1979-81

Cambridge University Press, 1980-81

McGraw Hill, 1982

Teller Festschrift, 1982s

Science Article, 1985

Joan Book Article, 1985

Publishing Correspondence, 1986

Astro Essays, 1989

#### Reviews

Astrophysical Journal, 1976-77

Physical Review, 1976-77

NSF Proposals and Reviews, 1977-79

Reference Reports

NASA, 1977, 1984

NSF Proposals, 1978

Astrophysical Journal, 1979-84

Journals, 1979-84

Annals of Physics, 1980

Journal of Mathmatical Physics, 1980

Physics Today, 1982

Astronomical Journal, 1982

Journal of Computational Physics, 1982-83

Physical Review, 1982-84

Monthly Notices, 1983

Extended Radio Sources-Review Article, 1981

WAT Observing, 1984

Smarr Book Reviews, 1984

Bahcall White Paper, 1989

Zeroth Draft, 1989

Press Draft and Disk, 1989

Wheless Draft-Smarr Comments, 1995

#### **Article Drafts**

Congruences and Hypersurfaces Paper with Sommers, 1975

Future Papers, 1975-76

Gravitational Radiation from Distant Encounters and from Head-On Collision of Black Holes, 1976

Chromon-Geon Paper, 1977

Annual Reviews Article, 1977

C-Metric Paper, 1978

Mercury Article, 1979

Hot Spot Simulation Paper, 1981

Wilson Festschrift Article, 1982 (2 folders)

Arts and Sciences Article, 1983

Astronomy Word Processing, 1983

Science Article, 1984-85 (4 folders)

Chapter on Astronomical Computing and Data Mining, 1990 (9 folders)

White Paper of the Computing and Data Processing Panel, 1990 (7 folders)

### Box 17:

Research and edits for *Supercomputing and the Transformation of Science*, Scientific American Library, W. H. Freeman and Company, 1992. Written with William J. Kaufmann III.

Chapter 1, "The Emergence of a Digital Science", 1987-92 (28 folders)

Chapter 2, "The Evolution of Supercomputers", 1987-92 (18 folders)

Chapter 3, "The Methods of Supercomputing", 1987-92 (39 folders)

### Box 18:

Chapter 4, "The Quantum World", 1987-92 (46 folders)

Chapter 5, 1987-92 "Inside Living Creatures", (39 folders)

Chpater 6, "Engineering Design and Analysis", 1987-92 (36 folders)

### Box 19:

Chapter 6, 1987-92 (7 folders)

Chapter 7, "Our Dynamic Planet", 1987-92 (58 folders)

Chapter 8, "Discovering the Universe", 1987-92 (33 folders)

Supercomputing Index, c. 1992 Freeman Jacket Cover, c. 1992 Kaufmann Edits and Correspondence

Book Production Correspondence, 1992

**Book Edits** 

Edits and Correspondence, 1992

### Box 20:

Spreadsheet Examples

**Book Additions** 

**Book Examples** 

Kaufmann Science Report, 1988

Kaufmann Book - Key Additions, 1991

Kaufmann E-Mail, 1991-92

Meeting with Kaufmann, 1991

Book Correspondence, 1992

Kaufmann Correspondence, 1988

Kaufmann Visit, 1990 (2 folders)

Supercomputing Book Letter, 1991

Science Highlights, 1989

Science Project, 1987

IBM Disks, 1991

Freeman and Company Correspondence

**Table of Contents** 

Book Layout, 1992

Finance and Contracts, 1988-91

Chapter Outlines, 1991-92 (3 folders)

Freeman General Correspondence, 1991-92

Calls, 1992

Early Drafts, 1988

Slides to Monarch

Illustrations, 1988-92

Color Xerox Not Used

Book Research without Chapter Headings, 1988-92 (27 folders)

Chapter Proofs, 1992

### Box 21:

Papers and Reprints

Reprint Request for Larry Smarr's Papers, 1999

1973

Basic Concepts in Finit Differencing of Partial Differential Equations

Mass Formula for Kerr Maximally Slicing a Black Hole Surface Geometry of Kerr

1975

The Binary Pulsar-Physical Processes, Possible Companions & Evolutionary Histories Synchronous Rotation

1976

Binary Pulsar

Collision of Two Black Holes I

Our Elastic Spacetime: Black Holes & Gravitational Waves

PhD Dissertation

1977

Are There Geon Analogues in Sourceless Gauge-field Theories?

Gravitational Radiation from Distant Encounters & from Head-on Collisions of Black

Holes: the Zero-frequency Limit

1978

**Kinematic Conditions** 

Radiation Gauge

Sources of Gravitational Radiation

Time Functions in Numerical Relativity

1979

**Gauge Conditions** 

General Relativistic Hydrodynamics

Observations of X-ray Sources in M31

Recent Developments in General Relativity

1980

Gravitational Waves & Redshifts: a Space Experiment for Testing Relativistic Gravity Using Multiple Time-correlated Radio Signals

Rayleigh-Taylor Overturn in Supernova Core Collapse

1981

Bubbles, Jets & Clouds in Active Galactic Nuclei

Can the Twin-exhaust Model Explain Radio Jets?

Hydrodynamic Formation of Twin-exhaust Jets

Summary-Radio Dust Infall Analysis

1982

Black Pits in Cluster Cores

Dumbbell Galaxies & Precessing Radio Jets

The Extended Radio Source in the Center of M31

The Missing Bulge Globular Clusters in M31: New Optical Canidates

Structure & Dynamics of Supersonic Jets

Supercomputer Famine in American Universities

The Supercomputer Famine in American Universities

1983

Black Hole Accretion: the Quasar Powerhouse

Computational Relativity: Numerical & Algebraic Approaches

the Contributions of Bryce Dewitt to Classical General Relativity

General Relativistic Hydrodynamics & Accretion Physics: a Numerical Approach

General Relativistic Magnetohydrodynamics

Numerical Models of Fat Disks: New Scenarios for Fluid Accretion into Black Holes

A Numerical Study of Nonspherical Black Hole Accretion–I. Equations & Test Problems

### Box 22:

A Numerical Study of Nonspherical Black Hole Accretion–II. Finite Differencing & Code Calibration

Propagation & Morphology of Pressure-confined Supersonic Jets

Shocks, Interfaces & Patterns in Supersonic Jets

1984

Are the Inner Cores of Galaxy Clusters Dominated by Dark Matter?

The Dynamic Effects of Angular Momentum on Accretion Flows near Black Holes

Abstract

Funnel Dynamics, Hollow Jets and Fat Disk Formation

Gr10-computational Relativity

Hot Spots in Radio Galaxies: a Comparison with Hydrodynamic Cap Simulations

Knot Production & Jet Disruption via Nonlinear K-H Pinch Instabilities

New Paradigms for Black Hole Accretion

New Scenarios for Fluid Accretion into Black Holes

Numerical Relativistic Grav. Collapse W/Spatial Time Slices

Why Dominant Cluster Jets Are Different

1985

An Approach to Complexity: Numerical Conputations

Denegerate Dwarf Binaries as Promising, Detectable Sources of Gravitational Radiation New Paradigms for Black Hole Accretion from High Resolution Supercomputer Experiments

A Numerical Study of Nonspherical Black Hole Accretion–III. Shock Dynamics, Hollow Jets & Disk Formation

1986

The Computational Science Revolution: Technology, Methodology & Sociology

1988

Kahn White Paper

Supercomputing Review

1989

Materials Science & Engineering for the 1990s

Shedding Light on Black Holes

Supercomputing Opportunities for the Protein Sciences

1991

The Decade of Discovery in Astronomy & Astrophysics

1990

VLSC-21 Paper

1992

Yearbook of Science & the Future

1993

Building the Interspace: National Information Infrsstructure for Digital Libraries

1996

LS Compendium

LS Compendium Supplement

1997

When Black Holes Collide

1998

Grids in Context

Hp-9000 Exemplar Tech. Servers "Ncsa Harnessing the Power of Computing for Research in Chemistry"

Prospectus Paper Outline

Supercomputers: Directions in Technology, Architecture & Applications

# Undated

Adaptive Optics Associates, Inc (Aoa)-current Wavefront Sensor Technologies Collision of ZBH I Paper

Cosmic Jets

Fluid Dynamical Mechanisms for Knots in Astrophysical Jets

Geon Analogue Paper

Gravitational Potential of Clusters of Galaxies

New Approaces to Complexity

Synchronous Rotation Paper

Untitled (L. Smarr)

Visualizing Black Hole Spacetimes