National Security Curriculum Vitae

Frederick K. Lamb

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Fields

Theoretical physics and astrophysics; nuclear arms control and space policy

Subjects of Special Interest

Relativistic and high energy astrophysics; radiation and plasmas; hydrodynamics and magnetohydrodynamics; white dwarfs, neutron stars, and black holes. International security, arms control, and disarmament; missile defense and space policy.

Education

1967–1970	Oxford University Degree: D. Phil. in Theoretical Physics (1970)
1963–1967	California Institute of Technology Degree: B.S. in Physics with Honors (1967)

Positions

2011–	Research Professor of Physics, University of Illinois at Urbana-Champaign
2011–	Brand and Monica Fortner Endowed Chair in Theoretical Astrophysics Emeritus, University of Illinois at Urbana-Champaign
2011–	Professor of Physics Emeritus, University of Illinois at Urbana-Champaign
1999–2011	Director, Center for Theoretical Astrophysics, University of Illinois at Urbana-Champaign
1998–2011	Inaugural Brand and Monica Fortner Endowed Chair in Theoretical Astrophysics, University of Illinois at Urbana-Champaign
1982–	Core Faculty Member, Program in Arms Control & Domestic and International Security (ACDIS), University of Illinois at Urbana-Champaign
1980–2011	Professor of Astronomy, University of Illinois at Urbana-Champaign
1978–2011	Professor of Physics, University of Illinois at Urbana-Champaign
1975–1978	Associate Professor of Physics, University of Illinois at Urbana-Champaign
1972–1975	Assistant Professor of Physics, University of Illinois at Urbana-Champaign
1970–1972	Instructor, University of Illinois at Urbana-Champaign
1970–1972	Prize Fellow, Magdalen College, Oxford University

Visiting Positions

2001–2002	Visiting Professor of Physics, Massachusetts Institute of Technology
2001–2002	Visiting Scholar, Harvard University and Center for Astrophysics
1993	Danish Research Academy Visiting Professor, Copenhagen University
1993	Visiting Scientist, Nordic Institute for Theoretical Physics

1985–1986	Visiting Scholar, Center for Space Science and Astrophysics and Departmen of Physics, Stanford University
1985–1986	Visiting Scholar, Center for International Security and Arms Control, Stanford University
1977–1978	Visiting Associate, California Institute of Technology

Honors and Awards

2005	Fellow, American Academy of Arts and Sciences
2005	Leo Szilard Award, American Physical Society
1985–1986	John Simon Guggenheim Foundation Fellow
1985–1986	Carnegie Science Fellow, Center for International Security and Arms Control, Stanford University
1974	Fellow, American Physical Society
1975–1976	Visiting Fellow, Institute of Astronomy, Cambridge
1975-1976	Fellow-Commoner, Churchill College, Cambridge
1974–1978	Alfred P. Sloan Foundation Fellow
1973–1974	Associate, Center for Advanced Study, University of Illinois at Urbana-Champaign
1969–1970	National Science Foundation Fellow, Oxford University
1967–1969	Marshall Scholar, Oxford University
1966	Tau Beta Pi, California Institute of Technology
1963–1967	National Merit Scholar, California Institute of Technology

Professional Memberships

American Physical Society (Fellow)

American Astronomical Society

Royal Astronomical Society (London)

International Astronomical Union

American Association for the Advancement of Science

Arms Control Association

Federation of American Scientists

Selected Physics and Astronomy Activities

2000–2003	Member, American Physical Society Panel on Public Affairs.
1996–2008	Chair, NASA Rossi X-ray Timing Explorer Satellite Users Group.
1996	Member, Task Group on Space Astronomy and Astrophysics, National Research Council Space Studies Board.
1994–1995	Member, NASA Rossi X-ray Timing Explorer Satellite Science Working Group.

1989–1990	Member, X-Ray Astronomy Program Working Group, National Aeronautics and Space Administration.
1989–1990	Member, Panel on High Energy Astronomy from Space, Astronomy and Astrophysics Survey Committee, National Academy of Sciences.
1987–1990	Chair-elect, Chair, and Past-Chair, High Energy Astrophysics Division, American Astronomical Society.
1984–1985	Member, NASA High Energy Astrophysics Management Operations Working Group.
1983–1985	Member, Executive Committee, High Energy Astrophysics Division American Astronomical Society.
1979–1980	Member, Galactic Working Group, Astronomy Survey Committee, National Academy of Sciences.
1981	Member, NASA Satellite Instrumentation Review Panel, X-Ray Timing Explorer.
1979	Member, X-Ray Astronomy Program Visiting Committee, Goddard Space Flight Center.

Physics and Astrophysics Publications

Author or co-author of more than 250 articles, monographs, and chapters in books on topics in physics and astrophysics; 59 articles have at least 50 citations, 16 of these have more than 100 citations, and 4 have more than 500 citations.

National Security Activities

Advocacy

- *Physicists' Coalition for Nuclear Threat Reduction* (2019–), sponsored by the American Physical Society, founding member.
- *Illinois Alliance to Prevent Nuclear War* (1980–1988). With Illinois Professor Larry Smarr, Lamb co-founded the Alliance in 1980, served as its President and principal public speaker from 1982–1986, and continued to serve on the Alliance Steering Committee for several more years. In addition to giving more than 50 talks on nuclear and space weapons and arms control throughout the state of Illinois, supported by the Alliance, Lamb also provided advice, information, and support during this period to Illinois SANE, the Illinois Nuclear Weapons Freeze Campaign, and other arms control advocacy groups.

Teaching

Physics/Global Studies 280: Nuclear Weapons, Nuclear War, and Arms Control

In 1981 Lamb initiated and co-developed an undergraduate course titled "Nuclear Weapons, Nuclear War, and Arms Control". This course has been taught every year since, usually by Lamb until 2013, when Professor Grosse-Perdekamp took over teaching it. It is thought to be the longest-running course on this subject in the United States. Approximately 3,000 students have completed Physics 280 since it was initiated. Approximately 150 seniors and graduate students

have been trained and then served as teaching assistants in the course. Many of these students have gone on to pursue careers in national and international security and arms control.

For a detailed description of Physics/Global Studies 280: Nuclear Weapons, Nuclear War, and Arms Control, see the information appended below.

Weekly Television Program

During 1983, Lamb presented a weekly television program, on a local television station, that was based on the content of his University of Illinois course "Nuclear Weapons, Nuclear War, and Arms Control".

ACDIS Summer Workshops on International Security

In June 2012, 2013, 2014, and 2015, Lamb interacted with students attending the Summer Workshop on International Security sponsored by the University of Illinois Program in Arms Control and Domestic & International Security (ACDIS) for graduating seniors and graduate students interested in a career in international security, and gave lectures entitled "Eliminating the threat of nuclear weapons".

ACDIS Summer Workshops for Journalists

During the mid-1980s, Lamb participated in summer workshops for young journalists from the New York Times, Washington Post, and other national newspapers and magazines were covering or had newly been assigned to cover national and international security issues. Lamb taught lecture-discussion sessions based on the content of his University of Illinois course "Nuclear Weapons, Nuclear War, and Arms Control".

Professional National Security Activities

2019–	Chair, American Physical Society Panel on Public Affairs Study of Missile Defense and National Security.
2019–	Founding member (2019–), Physicists' Coalition for Nuclear Threat Reduction, sponsored by the American Physical Society.
2017	Member, Space Policy Working Group of the U.K. Chief of the Defence Staff's Strategy Forum on Space, November 28, 2017.
2002	Organizer and participant, conference on missile defense for participants from the DoD's Missile Defense Agency, the DoE's nuclear weapons laboratories, the Institute for Defense Analyses, defense contractors, public interest organizations, and experts from academia, Center for International Security and Cooperation, Stanford University, October 29–30, 2002.
2001–2003	Co-chair, American Physical Society Study Group on Boost-Phase Intercept Systems for National Missile Defense.
2000	Chair, American Physical Society Advisory Committee on Technical Studies of National Missile Defense.
2000–	Core Faculty Member, University of Illinois Program in Arms Control & Domestic and International Security.
1999–2002	Principal Investigator of NASA grant NAG5-8740, "Simulation of turbulent mixing and propagation of nuclear burning in the surface layers of accreting

neutron stars", which was explicitly requested and granted by the U.S. government for the purpose of encouraging Russian nuclear weapons scientists working at the Chelyabinsk-70 (currently Snezhinsk) Russian Federal Nuclear Center – the All-Russian Institute of Technical Physics (VNIITF) – to remain in Russia during an economically very difficult time, by providing them with financial support to carry out peaceful scientific research on astrophysical problems that involve nuclear physics, jointly with me. Among other activities, the Russian co-PI, then Head of the Physics Divisiion at Chelyabinsk-70, and his deputy, visited Urbana to work with me on these problems.

1999 Participant, Panel on Space and Aerospace Vehicles at the DDR&E and Institute for Defense Analyses Workshop on Advanced Technologies and Future Joint War Fighting.

1990–1994 Consultant, CORRTEX Analysis System Project, U.S. Department of Defense

1989–1990 Consultant, U.S. Arms Control and Disarmament Agency.

1988–1998 Director, Science and Technology Section, University of Illinois Program in Arms Control, Disarmament, and International Security (ACDIS).

1986–1992 Personal advisor on nuclear test bans and arms control to Senator Paul Simon (Illinois).

1986–1990 Consultant, Congressional Office of Technology Assessment Study on Seismic Verification of Nuclear Test Limitation Treaties.

1986–1990 Consultant, House Armed Services Committee on verification of nuclear test limitation treaties.

1986–1990 Consultant, Senate Armed Services Committee on verification of nuclear test limitation treaties.

1986–1990 Consultant, Senate Foreign Relations Committee on verification of nuclear test limitation treaties.

1985–1993 Advisor on national security affairs to Rep. Terry L. Bruce (IL-19). Served as personal advisor and organized and chaired a council of technical advisors on national security.

1985–1988 Inaugural Member, Defense Science Study Group, Institute for Defense Analyses.

1985–2011 Consultant, Institute for Defense Analyses.

1985–1988 Member, Earth and Space Sciences Division Advisory Committee, Los Alamos National Laboratory.

1982–2000 Member, Executive Committee, University of Illinois Program in Arms Control, Disarmament, and International Security.

1980–1990 Consultant, Los Alamos National Laboratory.

Missile Defense and Space Policy

Meetings on Missile Defense and Space Policy

Conference on Missile Defense, Center for International Security and Cooperation, Stanford University, October 29–30, 2002. Organizer; chair, session on countermeasures to boost-phase intercept; discussion leader, discussion on boost-phase intercept options. Participants from DoD's Missile Defense Agency, DoE's nuclear weapons laboratories, the Institute for Defense Analyses, defense contractors, public interest organizations, and experts from academia.

Briefings on Missile Defense and Space Policy

- *60 years after Sputnik – A critical juncture in humanity's use of space*, Keynote Address to the UK Chief of the Defence Staff's Strategy Forum on Space, November 28, 2017.
- *The U.S. missile defense program: Can boost-phase defenses against ICBMs work?* Invited briefing, German Arms Control Agency Staff, Members of the German Armed Forces and Defense Ministry Staff, and defense scientists and engineers, German National Academy of Sciences, Berlin, Germany, March 24, 2004.
- *The U.S. missile defense program: Can boost-phase defenses against ICBMs work?* Briefing, Bundestag, Berlin, March 24, 2004.
- *Boost-phase intercept systems for national missile defense*, Invited Talk, 2003 JASON Fall Meeting, McLean, Virginia, November 22, 2003.
- *Boost-phase intercept systems for national missile defense: Scientific and technical issues*. Invited presentation, Defense Horizons Luncheon, National Defense University, Washington, D.C., August 14, 2003.
- *Boost-phase intercept systems for national missile defense: Scientific and technical issues*. Invited presentation, U.S. Department of State, July 18, 2003.
- *Boost-phase intercept systems for national missile defense: Scientific and technical issues*. Invited presentation, Institute for Defense Analyses, July 18, 2003.
- *Boost-phase intercept systems for national missile defense: Scientific and technical issues*. Invited presentation, Senate Armed Services Committee Staff, Washington, DC, July 17, 2003.
- *Boost-phase intercept systems for national missile defense: Scientific and technical issues*. Invited presentation, Carnegie Endowment for International Peace, Washington, DC, July 17, 2003.
- *Boost-phase intercept systems for national missile defense: Scientific and technical issues*. Invited presentation, House Armed Services Committee Staff, Washington, DC, July 16, 2003.
- *Boost-phase intercept systems for national missile defense: Scientific and technical issues*. Invited presentation, Senate Foreign Relations Committee Staff, July 15, 2003.
- *Ground, naval, and airborne boost-phase intercept system architectures*. Presentation, Conference on Missile Defense, Center for International Security and Cooperation. Stanford University. October 29–30, 2002.

- *Ballistic missile threat*s. Presentation, Conference on Missile Defense, Center for International Security and Cooperation. Stanford University. October 29–30, 2002.

Lectures and Public talks on Missile Defense and Space Policy

- *60 years after Sputnik – A critical juncture in humanity's use of space*, Dial Club Public Lecture, University of Illinois, November 12, 2018.
- *60 years after Sputnik – A critical juncture in humanity's use of space*, Physics Colloquium, University of Illinois, October 3, 2018.
- *U.S. missile defense programs: A case study in the interaction of science, technology, and public policy*, invited lecture, Harris School of Public Policy, University of Chicago, April 2, 2015.
- *U.S. missile defense programs: A case study in the interaction of science, technology, and public policy*, invited lecture, Harris School of Public Policy, University of Chicago, April 10, 2014.
- *U.S. missile defense programs: A case study in the interaction of science, technology, and public policy*. Invited lecture, Harris School of Public Policy, University of Chicago, April 25, 2013.
- *U.S. missile defense programs: Technology and theology*, invited lecture, Harris School of Public Policy, University of Chicago, March 7, 2012.
- *Would Proposed Defenses Against Nuclear-Armed Long-Range Missiles Work?* Nuclear Engineering Colloquium, University of Illinois, September 10, 2008.
- *Would Proposed Defenses Against Nuclear-Armed Long-Range Missiles Work?* Physics Colloquium, University of Arizona, February 22, 2008.
- *Could a Defense Against Intercontinental Missiles Work? History and Technology*, Saturday Honors Program for High School Students, sponsored by the University of Illinois Department of Physics, October 16, 2004.
- *Can boost-phase defenses against ICBMs work?* Plenary Talk, 2004 April APS Meeting, Denver, Colorado, May 3, 2004.
- *Approach and findings of the APS boost-phase missile defense study.* Plenary Talk, 2004 Spring Meeting of the German Physical Society DPG, Munich, March 25, 2004.
- *Can boost-phase defenses against ICBMs work*? Invited lecture, Woodrow Wilson School, Princeton University, February 23, 2004.
- *Defending the United States against ballistic missiles*. Physics Colloquium, University of Illinois at Urbana-Champaign, September 11, 2003.
- *APS Study of boost-phase intercept systems for national missile defense*. Press conference, National Press Club, Washington, D.C., July 15, 2003.

- *Space Weapons and the Future*. Two-hour invited public lecture sponsored by the University of Washington, Seattle, April 29, 1986.
- *Issues posed by anti-satellite weapons and the aerospace plane project*. Invited lecture-discussion at a meeting of University of Washington scientists and engineers, April 29, 1986.
- *Nuclear weapons and the Strategic Defense Initiative*. Hour-long interview and call-in program on Seattle radio stations KING and KUOW, April 29, 1986.
- *Anti-Satellite Weapons*. Physics Colloquium, Stanford University, Winter 1986.
- *Arguments for and against ASAT Development*. Seminar, Center for International Security and Cooperation, Stanford University, Winter 1986.
- *Current US and Soviet Space Assets and ASAT Capabilities*. Seminar, Center for International Security and Cooperation. Stanford University, Winter 1986.

Articles and Reports on Missile Defense and Space Policy

- **Boost-phase missile defense: The debate continues**
  D. Kleppner, F. K. Lamb, and D. Mosher
  Physics Today, Vol. 57, Issue 7, pp. 11–83 (2004)
- **Boost-phase defense against intercontinental ballistic missiles**
  D. Kleppner, F. K. Lamb, and D. Mosher
  Physics Today, Vol. 57, Issue 1, pp. 30–35 (2004).
- Report of the American Physical Society Study Group on Boost-Phase Intercept Systems for National Missile Defense: Scientific and Technical Issues
  D. Kleppner, F. K. Lamb, et al.
  Reviews of Modern Physics, Vol. 76, Number 3, Part II, pp. S1–S424 (2004).
- **Boost-phase intercept systems for national missile defense**
  F. K. Lamb
  Space News, September 1, 2003.
- Report of the American Physical Society Advisory Committee on Technical Studies of National Missile Defense
  F. K. Lamb, et al.
  Report sponsored by the APS Panel on Public Affairs, December 20, 2000.
- **Laser-powered anti-satellite weapons**
  F. K. Lamb
  Center for International Security and Arms Control Report, Stanford University, 1985.
- **Anti-satellite weapons**
  F. K. Lamb
  University of Illinois Physics Department Report *P-84-4-52*, University of Illinois, Urbana, Ill., 1984.

- **Legislative situation regarding space weapons**
  F. K. Lamb
  University of Illinois Physics Department Report *P-84-4-51*, University of Illinois, Urbana, Ill., 1984.

- **Space weaponry. I. A critical moment**
  F. K. Lamb
  University of Illinois Physics Department Report *P-84-2-26*, University of Illinois, Urbana, Ill., 1984.

- **Space weaponry. II. Current U.S. and Soviet space assets and ASAT capabilities**
  F. K. Lamb
  University of Illinois Physics Department Report *P-84-2-24*, University of Illinois, Urbana, Ill., 1984.

- **Space weaponry. III. Should the United States pursue an ASAT treaty with the Soviets?**
  F. K. Lamb
  University of Illinois Physics Department Report *P-84-2-23*, University of Illinois, Urbana, Ill., 1984.

- **Space weaponry. IV. Could an ASAT treaty be verified?**
  F. K. Lamb
  University of Illinois Physics Department Report *P-84-3-37*, University of Illinois, Urbana, Ill., 1984.

- **Space weaponry. V. Summary of arguments for and against ASAT weapons.**
  F. K. Lamb
  University of Illinois Physics Department Report *P-84-4-58*, University of Illinois, Urbana, Ill., 1984.

- **Weapons in space**
  F. K. Lamb
  University of Illinois Physics Department Report *P-84-2-25*, University of Illinois, Urbana, Ill., 1984.

Nuclear Weapons and Arms Control

Meetings on Nuclear Weapons and Arms Control

- Speaker and expert participant, international symposium on "The Korean Peninsula in Crisis?", March 28, 2019.

- Speaker and expert participant, national symposium on "Shifting Iran-U.S. Relations: Return to Status Quo Ante or New Alignments in the Middle East Region?, September 29, 2017.

- Speaker and expert participant, *Conference on Applications of Advanced and Innovative Computational Methods to Defense Science and Engineering* (Alexandria, VA: Institute for Defense Analyses), C 173–190 (1994).

- Speaker and expert participant, DARPA Information Exchange Meeting on **CORRTEX**, Newington, Virginia, February 1990.

- Speaker and expert participant, *12th Annual DARPA/GL Seismic Research Symposium*, Air Force Geophysics Laboratory, Hanscom Air Force Base, Mass., 1990.

- Speaker and expert participant, *11th Annual DARPA/AFGL Seismic Research Symposium*, Air Force Geophysics Laboratory, Hanscom Air Force Base, Mass., 1989.

- Speaker and expert participant, *Workshop IV: Yield Determinations*, Office of Technology Assessment Meeting on Seismic Verification of Nuclear Testing Treaties, 1987.

Briefings on Nuclear Weapons and Arms Control

- *Estimating the yields of underground nuclear explosions using* ***CORRTEX***, DARPA Information Exchange Meeting on **CORRTEX**, Newington, Virginia, February 1990.

Lectures and Public Talks on Nuclear Weapons and Arms Control

- *North Korea's nuclear and missile programs and U.S. strategies*, Invited Lecture, International Symposium on "The Korean Peninsula in Crisis?", March 28, 2019.
- *The Iran nuclear deal: Scientific and policy aspects*, Invited Seminar, Finnish Institute of International Affairs (FIIA), Helsinki, September 3, 2018.
- *The Iran nuclear deal: Scientific and policy aspects*, Colloquium co-sponsored by the Department of Physics and the Center on the Changing Character of War at Oxford University, December 1, 2017.
- The viability of the Iran nuclear deal (the Joint Comprehensive Pan of Action, JCPOA), invited lecture, national symposium on "Shifting Iran-U.S. Relations: Return to Status Quo Ante or New Alignments in the Middle East Region?", September 29, 2017.
- *Nuclear nonproliferation implications of the Iran nuclear deal*, invited presentation, national panel discussion on "Nuclear Non-Proliferation Efforts and Treaties", sponsored by the University of Illinois Program in Arms Control and Domestic & International Security (ACDIS), April 24, 2017.
- *The Iran nuclear deal: A major accomplishment in nuclear arms control*, Dial Club Public Lecture, University of Illinois, February 22, 2016.
- *The Iran nuclear deal: Scientific and policy aspects*, Physics Colloquium, University of Illinois, February 3, 2016.
- *The Iran nuclear deal: A major accomplishment in nuclear arms control*, Teach-in on the Iran nuclear deal, sponsored by the University of Illinois Program in Arms Control and Domestic & International Security (ACDIS), September 10, 2015.
- *Implications of the Iran nuclear deal*, hour-long interview and call-in program on radio station WDWS, July 21, 2015.
- *Eliminating the threat of nuclear weapons,* invited lecture, Summer Workshop on International Security for graduating seniors and graduate students interested in a career in international security, sponsored by the University of Illinois Program in Arms Control and Domestic & International Security (ACDIS), June 9, 2015.

- *Eliminating the Threat of Nuclear* Weapons. Invited lecture, Summer Workshop on International Security for graduating seniors and graduate students interested in a career in international security, sponsored by the University of Illinois Program in Arms Control and Domestic & International Security (ACDIS), June 12, 2014.
- *Eliminating the Threat of Nuclear Weapons,* lecture-discussion at the Summer Workshop on International Security for graduating seniors and graduate students interested in a career in international security, sponsored by the University of Illinois Program in Arms Control and Domestic & International Security (ACDIS), July 11, 2013.
- *Eliminating the Threat of Nuclear Weapons,* lecture-discussion at the Summer Workshop on International Security for graduating seniors and graduate students interested in a career in international security, sponsored by the University of Illinois Program in Arms Control and Domestic & International Security (ACDIS), July 10, 2012.
- *Recent progress in nuclear arms control: How New START was almost stopped and what we should do next*, Dial Club Public Lecture, University of Illinois, February 7, 2011.
- *The problem of dual use and control of nuclear materials*, Invited Seminar, University of Illinois Program in Arms Control and Domestic & International Security (ACDIS), March 1, 2006.
- *Countering the threat of nuclear terrorism*, August 2005 Days of Remembrance: Hiroshima and Nagasaki, Invited Public Lecture, August 5, 2005.
- *Current nuclear threats and possible responses*, Szilard Award Lecture, 2005 April APS Meeting, Tampa, Florida, April 18, 2005.

Chapters in Books on Nuclear Weapons and Arms Control

- **Multi-dimensional hydrodynamics as a tool in nuclear test ban verification**
  F. K. Lamb
  In *Applications of Advanced and Innovative Computational Methods to Defense Science and Engineering* (Alexandria, VA: Institute for Defense Analyses), C 173–190 (1994).
- **Yield estimation using shock wave methods**
  F. K. Lamb, B. W. Callen, and J. D. Sullivan
  In *Explosion Source Phenomenology*, *Geophysics Monograph Series*, Vol. 65, edited by S. R. Taylor, P. G. Richards, and H. J. Patton (Washington, D.C.: American Geophysical Union, 1991), 73–89.
- **Monitoring yields of underground nuclear tests using hydrodynamic methods**
  F. K. Lamb.
  In *Nuclear Arms Technologies in the 1990s*, edited by D. Schroeer and D. Hafemeister (AIP Conf. Proc. No. 178), pp. 109–148 (1988).

Articles and Reports on Nuclear Weapons and Arms Control

- **Numerical simulations of axially symmetric underground nuclear explosions: Evolution and apparent yields**
  R. A. Fiedler, F. K. Lamb, & J. D. Sullivan
  Report to the *Geophysical Sciences Division, Defense Advanced Research Projects Agency (1994).*

- **Numerical simulations of spherically symmetric underground nuclear explosions: Scaling laws, source effects, and apparent yields**
  R. A. Fiedler, F. K. Lamb, and J. D. Sullivan
  Report to the *Geophysical Sciences Division, Defense Advanced Research Projects Agency (1994).*

- **An approximate analytical model of shock waves from underground nuclear explosions**
  F. K. Lamb, B. Callen, and J. D. Sullivan
  J. Geophys. Res., **97**, 515–535 (1992).

- **Hydrodynamic verification of the Threshold Test Ban and Peaceful Nuclear Explosions Treaties**
  F. K. Lamb
  Arms Control Today, September, 1990, p. 22.

- **Hydrodynamic determination of the yields of underground nuclear explosions**
  B. W. Callen, F. K. Lamb, and J. D. Sullivan
  In *Proc. 12th Annual DARPA/GL Seismic Research Symposium* (Air Force Geophysics Laboratory, Hanscom Air Force Base, Mass., 1990), pp. 241–250.

- **Insensitive interval in the evolution of shock waves from explosions**
  B. W. Callen, F. K. Lamb, and J. D. Sullivan
  In *Shock Compression of Condensed Matter–1989, Proc. 6th APS Topical Conference*, edited by S. C. Schmidt, J. N. Johnson, and L. W. Davison (New York: Elsevier Science), pp. 241–244 (1990).

- **Yield estimation using CORRTEX**
  F. K. Lamb
  In *Proc. 11th Annual DARPA/AFGL Seismic Research Symposium* (Air Force Geophysics Laboratory, Hanscom Air Force Base, Mass., 1989).

- **Insensitive interval in the evolution of shock waves from underground nuclear explosions**
  F. K. Lamb, B. W. Callen, and J. D. Sullivan
  In *Proc. 11th Annual DARPA/AFGL Seismic Research Symposium* (Air Force Geophysics Laboratory, Hanscom Air Force Base, Mass., 1989).

- **Hydrodynamic methods of yield estimation**
  F. K. Lamb
  Appendix to U.S. Congress, Office of Technology Assessment, *Seismic Verification of* Nuclear *Testing Treaties*, OTA-ISC-361 (Washington, DC: U.S. Government Printing Office, May 1988).

- **Hydrodynamic methods of yield estimation**
  F. K. Lamb
  Report for the U.S. Congress, Office of Technology Assessment, February 15, 1988.

- **Monitoring yields of underground nuclear tests**
  F. K. Lamb
  Congressional Record, 133, No. 25, February 19, 1987.

- **Monitoring yields of underground nuclear tests**
  F. K. Lamb
  In *Threshold Test Ban Treaty and Peaceful Nuclear Explosions Treaty*, Hearings Before the Committee on Foreign Relations, United States Senate, January 13 and 15, 1987 (Washington, D.C.: U.S. Government Printing Office, 1987), pp. 359–370.

- **An approximate solution for ground shock propagation**
  F. K. Lamb
  Working Paper WP-87-2-1, Program in Arms Control, Disarmament, and International Security, University of Illinois, Urbana, Ill., February 1987.

- **Monitoring underground nuclear tests: An assessment of hydrodynamic methods**
  F. K. Lamb
  Report for the U.S. Congress, Office of Technology Assessment, June 21, 1987.

- **An independent assessment of CORRTEX**
  F. K. Lamb
  Report for the U.S. Congress, Office of Technology Assessment, April 1987.

- **Missile volume as a possible arms control constraint on the military potential of ballistic missiles**
  F. K. Lamb and D. Stein
  Defense Science Study Group Report, Institute for Defense Analyses, May 22, 1987.

- **Could a nuclear freeze work?**
  F. K. Lamb
  University of Illinois Physics Department Report P-83-10-141, University of Illinois, Urbana, Ill., 1983.