




Elliott Bloom

Professor of Particle Physics and Astrophysics, Emeritus
SLAC General Program

 Curriculum Vitae available Online

Bio

ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, SLAC General Program

Publications

PUBLICATIONS

- **Einstein@Home discovers a radio-quiet gamma-ray millisecond pulsar.** *Science advances*
Clark, C. J., Pletsch, H. J., Wu, J., Guillemot, L., Kerr, M., Johnson, T. J., Camilo, F., Salvetti, D., Allen, B., Anderson, D., Aulbert, C., Beer, C., Bock, et al
2018; 4 (2): eaa07228
- **Strong optimized conservative Fermi-LAT constraints on dark matter models from the inclusive photon spectrum** *PHYSICAL REVIEW D*
Massari, A., Izaguirre, E., Essig, R., Albert, A., Bloom, E., Gomez-Vargas, G. A.
2015; 91 (8)
- **Search for 100 MeV to 10 GeV gamma-ray lines in the Fermi-LAT data and implications for gravitino dark matter in the mu nu SSM** *JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS*
Albert, A., Gomez-Vargas, G. A., Grefe, M., Munoz, C., Weniger, C., Bloom, E. D., Charles, E., Mazziotta, M. N., Morselli, A.
2014
- **Electronic Logbook for Space System Integration & Test Operations** *IEEE TRANSACTIONS ON AEROSPACE AND ELECTRONIC SYSTEMS*
Kavelaars, A. T., Bloom, E., Claus, R., Fouts, K., Tuvi, S.
2009; 45 (1): 167-178
- **Analysis methods for Milky Way dark matter satellite detection** *1st GLAST Symposium*
Wang, P., Wai, L., Bloom, E.
AMER INST PHYSICS.2007: 582-583
- **The search for dark matter via gamma rays from astronomical sources using EGRET and GLAST** *NUCLEAR PHYSICS B-PROCEEDINGS SUPPLEMENTS*
Bloom, E. D.
2004; 134: 103-111
- **A SELECTIVE EXPERIMENTAL REVIEW OF THE STANDARD MODEL** *ANNALS OF THE NEW YORK ACADEMY OF SCIENCES*
Bloom, E. D.
1986; 461: 384-414
- **QUARKONIUM** *USPEKHI FIZICHESKIKH NAUK*
Bloom, E. D., FELDMAN, G. J.
1983; 139 (3): 529-551
- **PHYSICS WITH THE CRYSTAL BALL DETECTOR** *ANNUAL REVIEW OF NUCLEAR AND PARTICLE SCIENCE*

- Bloom, E. D., Peck, C. W.
1983; 33: 143-197
- **QUARKONIUM** *SCIENTIFIC AMERICAN*
Bloom, E. D., FELDMAN, G. J.
1982; 246 (5): 66-?
 - **NEW PARTICLE SPECTROSCOPY, QUARKONIUM AND GLUONIC MESONS** *JOURNAL DE PHYSIQUE*
Bloom, E. D.
1982; 43 (NC3): 407-430
 - **STUDY OF THE REACTION $\Psi^- \rightarrow \gamma \gamma \Psi$** *PHYSICAL REVIEW D*
Oreglia, M., BLOOM, E., Bulos, F., Chestnut, R., Gaiser, J., Godfrey, G., Kiesling, C., Lockman, W., SCHARRE, D. L., Partridge, R., Peck, C., Porter, F. C., ANTREASYAN, et al
1982; 25 (9): 2259-2277
 - **MEASUREMENT OF INCLUSIVE η -PRODUCTION IN e^+e^- INTERACTIONS NEAR CHARM THRESHOLD** *PHYSICAL REVIEW LETTERS*
Partridge, R., Peck, C., Porter, F. C., Gu, Y. F., Kollmann, W., Richardson, M., Strauch, K., Wacker, K., ASCHMAN, D., Bagger, J., Burnett, T., CAVALLISFORZA, M., Joy, et al
1981; 47 (11): 760-763
 - **DECAY $\Psi^- \rightarrow \gamma \gamma$ AND A SEARCH FOR THE η -C** *PHYSICAL REVIEW LETTERS*
Partridge, R., Peck, C., Porter, F., KOLLMAN, W., Richardson, M., Strauch, K., Wacker, K., ASCHMAN, D., Burnett, T., CAVALLISFORZA, M., Coyne, D., Sadrozinski, H., BLOOM, et al
1980; 44 (11): 712-716
 - **MEASUREMENT OF THE DECAYS $\Psi^- \rightarrow \eta \Psi$ AND $\Psi^- \rightarrow \rho \Psi$** *PHYSICAL REVIEW LETTERS*
Oreglia, M., BLOOM, E., Bulos, F., Chestnut, R., Gaiser, J., Godfrey, G., Kiesling, C., Partridge, R., Peck, C., Porter, F., Kollmann, W., Richardson, M., Strauch, et al
1980; 45 (12): 959-962
 - **OBSERVATION OF AN η -C CANDIDATE STATE WITH MASS 2978 ± 9 MEV** *PHYSICAL REVIEW LETTERS*
Partridge, R., Peck, C., Porter, F., Kollmann, W., Richardson, M., Strauch, K., Wacker, K., ASCHMAN, D., Burnett, T., CAVALLISFORZA, M., Coyne, D., Sadrozinski, H., Hofstadter, et al
1980; 45 (14): 1150-1153
 - **OBSERVATION OF A UNIVERSAL SHAPE REGULARITY IN EARTHQUAKE FREQUENCY-MAGNITUDE DISTRIBUTIONS** *BULLETIN OF THE SEISMOLOGICAL SOCIETY OF AMERICA*
Bloom, E. D., ERDMANN, R. C.
1980; 70 (1): 349-362
 - **USE OF A LOW-ENERGY PROTON ACCELERATOR FOR CALIBRATING A LARGE NAI(TL) ARRAY IN A HIGH-ENERGY PHYSICS EXPERIMENT** *IEEE TRANSACTIONS ON NUCLEAR SCIENCE*
KIRKBRIDE, G. I., OREILLY, J. G., Tompkins, J. C., Aschman, D. G., BERON, B. L., Bloom, E. D., Bulos, F., Gaiser, J. E., Godfrey, G. L., Hofstadter, R., Hughes, E. B., KIESLING, C. M., KOLANOSKI, et al
1979; 26 (1): 1535-1538
 - **CRYSTAL BALL DATA ACQUISITION-SYSTEM** *IEEE TRANSACTIONS ON NUCLEAR SCIENCE*
Chestnut, R., Kiesling, C., BLOOM, E., Bulos, F., Gaiser, J., Godfrey, G., Oreglia, M., Partridge, R., Peck, C., Porter, F., ASCHMAN, D., CAVALLISFORZA, M., Coyne, et al
1979; 26 (4): 4395-4398
 - **COMPACT MULTIWIRED PROPORTIONAL CHAMBERS AND ELECTRONICS FOR THE CRYSTAL BALL DETECTOR** *IEEE TRANSACTIONS ON NUCLEAR SCIENCE*
Gaiser, J. E., LIBERMAN, A. D., Rolfe, J., BERON, B. L., Bloom, E. D., Bulos, F., Hofstadter, R., Hughes, E. B., Kiesling, C., KOLLMAN, W. D., OREILLY, J. G., Partridge, R. A., Peck, et al
1979; 26 (1): 173-180
 - **COMPARISON OF YIELDS OF INELASTIC ELECTRON AND POSITRON SCATTERING FROM HYDROGEN AND DEUTERIUM AT 15 (GEV-C)²** *PHYSICAL REVIEW LETTERS*
Rochester, L. S., Atwood, W. B., Bloom, E. D., Cottrell, R. L., Coward, D. H., DeStaeblcr, H., MESTAYER, M., Prescott, C. Y., Stein, S., Taylor, R. E., Trines, D.

1976; 36 (22): 1284-1287

- **INELASTIC ELECTRON-SCATTERING FROM HYDROGEN AT 50DEGREES AND 60DEGREES** *PHYSICS LETTERS B*
Atwood, W. B., Bloom, E. D., Cottrell, R. L., DeStaebler, H., MESTAYER, M., Prescott, C. Y., Rochester, L. S., Stein, S., Taylor, R. E., Trines, D.
1976; 64 (4): 479-482
- **ELECTRON-SCATTERING AT 4 DEGREES WITH ENERGIES OF 4.5-20 GEV** *PHYSICAL REVIEW D*
Stein, S., Atwood, W. B., Bloom, E. D., Cottrell, R. L., DeStaebler, H., Jordan, C. L., PIEL, H. G., Prescott, C. Y., Siemann, R., Taylor, R. E.
1975; 12 (7): 1884-1919
- **A-DEPENDENCE OF HIGH-ENERGY INELASTIC ELECTRON-NUCLEUS SCATTERING** *PHYSICS LETTERS B*
DITZLER, W. R., Breidenbach, M., Friedman, J. I., Kendall, H. W., POUCHER, J. S., Bloom, E. D., Cottrell, R. L., Coward, D. H., DeStaebler, H., Jordan, C. L., Piel, H., Taylor, R. E.
1975; 57 (2): 201-204
- **CHARGED HADRON MULTIPLICITIES AND TOPOLOGIES IN INELASTIC MU-P SCATTERING** *PHYSICS LETTERS B*
Ballam, J., Bloom, E. D., Carroll, J. T., Chadwick, G. B., Cottrell, R. L., Dellanegra, M., DeStaebler, H., GERHWIN, L. K., Keller, L. P., Mestayer, M. D., Moffeit, K. C., Prescott, C. Y., Stein, et al
1975; B 56 (2): 193-196
- **HIGH-ENERGY SINGLE-ARM INELASTIC E-P AND E-D SCATTERING AT 6 AND 10 DEGREES** *PHYSICAL REVIEW LETTERS*
POUCHER, J. S., BREIDENB, M., DITZLER, R., Friedman, J. I., Kendall, H. W., Bloom, E. D., Cottrell, R. L., Coward, D. H., DESTAEBL, H., Jordan, C. L., Piel, H., Taylor, R. E.
1974; 32 (3): 118-121
- **PRODUCTION OF VECTOR-MESONS BY MUONS IN A HYBRID BUBBLE-CHAMBER EXPERIMENT** *PHYSICAL REVIEW D*
Ballam, J., Bloom, E. D., Carroll, J. T., Chadwick, G. B., Cottrell, R. L., DELLANEG, M., DESTAEBL, H., GERSHWIN, L. K., Keller, L. P., Mestayer, M. D., Moffeit, K. C., Prescott, C. Y., Stein, et al
1974; 10 (3): 765-776
- **MEASUREMENTS OF INELASTIC ELECTRON-SCATTERING CROSS-SECTIONS NEAR ONE-PION THRESHOLD** *PHYSICAL REVIEW LETTERS*
Bloom, E. D., Cottrell, R. L., DESTAEBL, H., Jordan, C. L., PIEL, H. G., Prescott, C. Y., Siemann, R., Stein, S., Taylor, R. E.
1973; 30 (23): 1186-1189