



## Elliott Bloom

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### Bio

#### ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, SLAC General Program

#### Publications

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#### 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): eaao7228
- **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  $\Psi^- \rightarrow \gamma \gamma \text{-} J/\Psi$  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  $\eta$ -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  $J/\Psi \rightarrow \eta \gamma$  AND A SEARCH FOR THE  $\eta \rightarrow C$  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  $\Psi^- \rightarrow \eta \pi^+ \pi^-$  AND  $\Psi^- \rightarrow \eta \pi^+ \pi^- \pi^0$  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  $\eta \rightarrow C$  CANDIDATE STATE WITH MASS  $2978 \pm 9$  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)<sup>2</sup> PHYSICAL REVIEW LETTERS**

- Rochester, L. S., Atwood, W. B., Bloom, E. D., Cottrell, R. L., Coward, D. H., DeStaebler, 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., GERHSHWIN, 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