

Bloomfield wins Apker Award for undergraduate research

Louis A. Bloomfield of Amherst College has been chosen the winner of the 1979 Apker Award, George E. Pake (Xerox), chairman of the 1979 selection committee and former APS president, announced.

The Apker Award recognizes outstanding achievement in physics by an undergraduate student who demonstrates great potential for future scientific accomplishment. The award consists of \$2000, a certificate citing the research and the school where the work was done and an allowance for travel to the APS Annual Meeting. The Apker Award is the only national prize recognizing achievement in physics at the undergraduate level.

The selection committee also made special mention of the work of the three other finalists in this competition: John A. Biretta, Jeffrey D. Richman and Abel Weinrib.

Bloomfield, as part of his application, submitted a paper describing his original research on the "Onset of Superfluidity in Unsaturated Films on Graphite," done while he was an undergraduate at Amherst. He is now a graduate student in physics at Stanford University. Bloomfield will receive his award during the ceremonial session of the APS Annual Meeting in Chicago on 22 January. He is also scheduled to give an invited paper on his work during this meeting.

Biretta presented the results of his undergraduate research at Thomas More College in Kentucky on a number of topics in radioastronomy, including "Rotational Interpretation of the Orion Molecular Cloud Dynamics." He is now doing graduate work in physics at Caltech.

Richman was an undergraduate at Yale University when he submitted a report on "Pulsar Velocities as an Effect of an Anisotropic Parity-Nonconserving Neutrino Emission." He is also doing his graduate work in physics at Caltech.

Weinrib, as an undergraduate at MIT, did research on "Hydrogen Atom-Molecular Hydrogen Surface Interactions." He is now a graduate student in physics at Harvard University.

Others nominated by their undergraduate physics departments for the Apker Award are listed below with their institutional affiliations and the title of their undergraduate research project:



Apker Award finalists from left to right: Jeffrey Richman (Yale); Thomas Biretta (Thomas More College); Abel Weinrib (MIT), and the winner, Louis Bloomfield (Amherst College).

Richard P. Binzel (Macalester College), "Photoelectric Astronomy; Satellites of Asteroids"; James P. Crutchfield (University of California at Santa Cruz), "Prediction and Stability in Classical Mechanics"; Alan K. Harrison (Brigham Young University), "Research Projects in Electromagnetic Theory"; Robert J. Meier Jr (Villanova University), "Linear Partial Difference Equations: Applications to the He Atom; Fast Fourier Transform Algorithms"; Thomas J. Phillips (Stanford University), "Measuring the Energy Dependence of the Time Constant for Build-up of Polarization at SPEAR"; E. Sterl Phinney (Caltech), "Analysis of Pulsar Statistics"; Thomas Schimert (University of Minnesota), "Effect of the Majorana Component in the ΔN Potential on B_{Λ} (${}^5_{\Lambda}\text{He}$)"; Michael K. Smith (US Naval Academy), "Dipolar Defects in Rare-Earth-Doped Alkaline-Earth Fluorides," and Andrea R. Spruck (Marquette University), "Seasonal Recession of Mars' South Polar Cap as Seen by Viking."

Nominations invited. Nominations for the 1980 Apker Award are open to students at colleges or universities in the United States who were enrolled as undergraduates during at least a part of the 12-month period preceding the 15 June

deadline. Only one candidate may be nominated by a physics department. The candidate should have completed the requirements for an undergraduate degree with an excellent academic record and should have demonstrated exceptional potential for scientific research by an original contribution to physics.

The application should include a letter of nomination from the head of the physics department; a copy of the student's academic transcript; a senior thesis, publication, or other documentation written by the student (including a 1000-word summary describing the original contribution to physics submitted for this award), and two letters of recommendation from physicists who know the candidate's individual contribution to the work submitted. The deadline for completed applications is 15 June.

The selection committee, to be chaired in 1980 by Norman Ramsey (Harvard), will review complete applications and will select the winner from among four finalists invited for interviews in September or October.

Interested students or faculty should contact J. A. Burton, Administrator, Apker Award, The American Physical Society, 335 East 45th Street, New York, N.Y. 10017. Phone (212) 682-7341. □