



THE WILLIAM LOWELL PUTNAM MATHEMATICAL COMPETITION

ANNOUNCEMENT OF WINNERS

of the thirty-ninth annual competition held on December 2, 1978

WINNING TEAMS

<i>Rank</i>	<i>School</i>	<i>Team Members (in alphabetical order)</i>
1st	CASE WESTERN RESERVE UNIVERSITY	Edward J. Branagan, Jr., Paul M. Herdeg, Russell D. Lyons
2nd	WASHINGTON UNIVERSITY	George T. Gilbert, Philip I. Harrington, Tim J. Steger
3rd	UNIVERSITY OF WATERLOO	Michael H. Albert, Rajiv Gupta, Geoffrey Mess
4th	HARVARD UNIVERSITY	Daniel S. Freed, Stephen W. Modzelewski, Alan S. Stern
5th	CALIFORNIA INSTITUTE OF TECHNOLOGY	Christopher S. Bretherton, Steve C. Jackson, Peter W. Shor

The first place team receives an award of \$5000 and each member of the team receives \$250. The awards for second place are \$2500 and \$200; for third place \$1500 and \$150; for fourth place \$1000 and \$100; and for fifth place \$500 and \$50.

In each of the following categories, the listing is in alphabetical order.

THE PUTNAM FELLOWS—THE FIVE HIGHEST RANKING INDIVIDUALS

Each receives an award of \$500

RANDALL L. DOUGHERTY	University of California, Berkeley
MARK P. KLEIMAN	Princeton University
RUSSELL D. LYONS	Case Western Reserve University
PETER W. SHOR	California Institute of Technology
STEVEN T. TSCHANTZ	University of California, Berkeley

THE NEXT FIVE HIGHEST RANKING INDIVIDUALS (Each receives an award of \$250)

DANIEL V. D'ERAMO	Massachusetts Institute of Technology
PHILIP I. HARRINGTON	Washington University
PAUL M. HERDEG	Case Western Reserve University
STEPHEN W. MODZELEWSKI	Harvard University
MILLER S. PUCKETTE	Massachusetts Institute of Technology

HONORABLE MENTION—TEAMS

UNIVERSITY OF CALIFORNIA, SANTA BARBARA	Daniel N. Abellera, Timothy Redmond, John R. Rose
McGILL UNIVERSITY	Neal N. Madras, Patrick R. Sheppard, Patrick A. N. Smith
UNIVERSITY OF PENNSYLVANIA	Robin Forman, Hal M. Switkay, Deane Yang
PRINCETON UNIVERSITY	Raymond A. Coley, Bruce D. Ladendorf, Matthew P. Wiener
STANFORD UNIVERSITY	Nicholas E. Baxter, Timothy M. Quey, Lloyd E. Sakazaki

HONORABLE MENTION—INDIVIDUALS

MICHAEL H. ALBERT, University of Waterloo	NEAL N. MADRAS, McGill University
KENNETH S. ALEXANDER, University of Washington	GEOFFREY MESS, University of Waterloo
MICHAEL J. BARALL, Princeton University	RICHARD T. MIFFLIN, Rice University
ADAM J. BENESCHAN, University of California, Irvine	RENATO E. MIROLLO, Columbia University
JOSHUA D. BERNOFF, Pennsylvania State University	DAVID J. MONTANA, Harvard University
EDWARD J. BRANAGAN, JR., Case Western Reserve University	LARRY J. ROMANS, University of California, Davis
CHRISTOPHER S. BRETHERTON, California Institute of Technology	JOHN R. ROSE, University of California, Santa Barbara
DAVID D. CHAMBLISS, Princeton University	LORENZO A. SADUN, Massachusetts Institute of Technology
RAYMOND A. COLEY, Princeton University	HARRY A. SMITH, University of Michigan, Ann Arbor
BORIS A. DATSKOVSKY, Columbia University	PATRICK A. N. SMITH, McGill University
MATTHEW T. DELEVORYAS, Rice University	TIM J. STEGER, Washington University
ROBIN FORMAN, University of Pennsylvania	JOHN R. STEMBRIDGE, California Institute of Technology
MARK HAIMAN, Massachusetts Institute of Technology	ALAN S. STERN, Harvard University
DAVID A. HUSE, University of Massachusetts, Amherst	CHARLES H. WALTER, Princeton University
DANIEL G. KNIERIM, University of California, Davis	DAVID S. WITTE, University of Wisconsin, Madison
RICHARD J. LA SOTA, University of Illinois, Urbana-Champaign	CARL K. WOLL, University of Rochester

A total of 2019 students from 339 colleges and universities in Canada and the United States participated in the competition. There were teams from 246 schools. More complete details will appear in the American Mathematical Monthly.

March 14, 1979

L. F. Klosinski, Director; G. L. Alexanderson and A. P. Hillman; Associate Directors