THE WILLIAM LOWELL PUTNAM MATHEMATICAL COMPETITION

ANNOUNCEMENT OF WINNERS of the seventy-first competition held on December 4, 2010

WINNING TEAMS

Rank	School	Team Members (in alphabetical order)
1	CALIFORNIA INSTITUTE OF TECHNOLOGY	Yakov Berchenko-Kogan, Jason C. Bland, and Brian R. Lawrence
2	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	Sergei S. Bernstein, Whan Ghang, and Jacob N. Steinhardt
3	HARVARD UNIVERSITY	Kevin Lee, Arnav Tripathy, and Alex (Lin) Zhai
4	UNIVERSITY OF CALIFORNIA, BERKELEY	Shiyu Li, Evan M. O'Dorney, and David D. Gee
5	UNIVERSITY OF WATERLOO	Steven N. Karp, Boyu Li, and Malcolm A. Sharpe

The first place team receives an award of \$25,000 and each member of the team receives \$1,000. The awards for second place are \$20,000 and \$800; for third place \$15,000 and \$600; for fourth place \$10,000 and \$400; and for fifth place \$5,000 and \$200.

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 \$2,500.

YU DENG	Massachusetts Institute of Technology
BRIAN R. LAWRENCE	California Institute of Technology
SEOK HYEONG LEE	Stanford University
COLIN P. SANDON	Massachusetts Institute of Technology
ALEX (LIN) ZHAI	Harvard University

THE NEXT NINE HIGHEST RANKING INDIVIDUALS

Each receives an award of \$1,000.

IURIE BOREICO	Harvard University
VLAD FIROIU	Massachusetts Institute of Technology
ERIC K. LARSON	Harvard University
ZEHAO LI	Worcester Polytechnic Institute
TENGYU MA	Rice University
GYUJIN OH	Stanford University
JOHN V. PARDON	Princeton University
JACOB N. STEINHARDT	Massachusetts Institute of Technology
ARNAV TRIPATHY	Harvard University

THE NEXT TEN HIGHEST RANKING INDIVIDUALS

Each receives an award of \$250.

YAKOV I. BERCHENKO-KOGAN	California Institute of Technology
SERGEI S. BERNSTEIN	Massachusetts Institute of Technology
JASON C. BLAND	California Institute of Technology
ZARATHUSTRA E. BRADY	California Institute of Technology
WHAN GHANG	Massachusetts Institute of Technology
WILLIAM A. JOHNSON	University of Washington, Seattle
KONSTANTIN MATVEEV	University of Toronto
XIAOSHENG MU	Yale University
EVAN M. O'DORNEY	University of California, Berkeley
ALEXANDR ZAMORZAEV	Massachusetts Institute of Technology

HONORABLE MENTION—TEAMS

DUKE UNIVERSITY
PRINCETON UNIVERSITY
STANFORD UNIVERSITY
UNIVERSITY OF BRITISH COLUMBIA
UNIVERSITY OF TORONTO

STEVEN N. KARP, University of Waterloo

ERICK P. KNIGHT, Princeton University

JUSTIN KOPINSKY, University of Illinois, Urbana-Champaign

SAM G. KELLER, Stanford University

EMIL T. LALOV, Connecticut College

PAK HIN LEE, Stanford University

MIKHAIL P. LAVROV, Duke University

Vivek Bhattacharya, Alan Guo, and Mikhael P. Lavrov Xue Liu, John V. Pardon, and Tengyao Wang Jeffrey Chen, Seok Hyeong Lee, and Jae Hyun Park Mohammad Bavarian, Karlming Chen, and Ronnie Chen Konstantin Matveev, Alexander Remorov, and Sida Wang

HONORABLE MENTION—INDIVIDUALS

ROHIT AGRAWAL, University of Minnesota, Twin Cities ALEXANDER G. ANDERSON, Washington University, St. Louis FRANK D. BAN, University of Waterloo MOHAMMAD BAVARIAN, University of British Columbia, Vancouver JOHN D. BERMAN, Massachusetts Institute of Technology TIMOTHY J. BLACK, California Institute of Technology CRAIG M. BURKHART, Harvey Mudd College YI-WEI CHAN, University of Illinois, Urbana-Champaign YU CHENG, Massachusetts Institute of Technology PAUL F. CHRISTIANO, Massachusetts Institute of Technology MILES D. EDWARDS, Indiana University, Bloomington SAM S. ELDER, California Institute of Technology IAN A. FRANKEL, Princeton University DAVID D. GEE, University of California, Berkeley HIRAM B. GOLZE, Brigham Young University SHERRY GONG, Harvard University BRIAN C. HAMRICK, Massachusetts Institute of Technology TRAVIS J. HANCE, Massachusetts Institute of Technology NATHAN R. HARMAN, University of Massachusetts, Amherst MATTHEW A. HARRISON-TRAINOR, University of Waterloo MARCELLO M. HERRESHOFF, Stanford University ADAM C. HESTERBERG, Princeton University IN-JEE JEONG, Brown University

AVI W. LEVY, University of Texas, Dallas PAUL D. LEWIS, University of Michigan, Ann Arbor DANIEL LI, Massachusetts Institute of Technology SHIYU LI, University of California, Berkeley SUNKYU LIM, Stanford University KEVIN LIN, University of Rochester ZHI KIN LOKE, Stanford University NIKITA LVOV, McGill University JEFFREY A. MANNING, California Institute of Technology PALMER C. MEBANE, Harvey Mudd College OFIR NACHUM, Massachusetts Institute of Technology LYUBOSLAV N. PANCHEV, Stanford University DANIEL E. POORE, Pomona College YUE PU, Purdue University, West Lafavette ALEXANDER REMOROV, University of Toronto ELINA M. ROBEVA, Stanford University DAVID S. ROLNICK, Massachusetts Institute of Technology DAVID B. RUSH, Massachusetts Institute of Technology KRISHANU R. SANKAR, Massachusetts Institute of Technology JONATHAN SCHNEIDER, Massachusetts Institute of Technology NATHANIEL B. SHAR, Stanford University MINSEON SHIN, Massachusetts Institute of Technology ANTHONY Y. WANG, Massachusetts Institute of Technology TENGYAO WANG, Princeton University YINGHUI WANG, Massachusetts Institute of Technology CHIU WAI WONG, Massachusetts Institute of Technology GEORGE L. XING, Massachusetts Institute of Technology GJERGJI ZAIMI, California Institute of Technology ZEYIN ZHANG, University of Michigan, Ann Arbor ALEX W. ZORN, University of Chicago

ELIZABETH LOWELL PUTNAM PRIZE

Winner receives an award of \$1,000

YINGHUI WANG

Massachusetts Institute of Technology

QUESTIONS COMMITTEE

Bjorn Poonen (Chair), Massachusetts Institute of Technology; Izabella Laba, University of British Columbia; and George T. Gilbert, Texas Christian University.

A total of 4296 students from 546 colleges and universities in Canada and the United States participated in the Competition. There were teams from 442 institutions. More complete details will appear in the *American Mathematical Monthly*.

March 7, 2011

Leonard F. Klosinski, Director; Gerald L. Alexanderson, Loren C. Larson and Mark Krusemeyer, Associate Directors