

THE WILLIAM LOWELL PUTNAM MATHEMATICAL COMPETITION

ANNOUNCEMENT OF WINNERS

of the seventy-fourth competition held on December 7, 2013

WINNING TEAMS

<i>Rank</i>	<i>School</i>	<i>Team Members (in alphabetical order)</i>
1	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	Benjamin P. Gunby, Mitchell M. Lee, and Zipei Nie
2	CARNEGIE-MELLON UNIVERSITY	Michael Druggan, Linus U. Hamilton, and Thomas E. Swayze
3	STANFORD UNIVERSITY	Vishal Arul, Ravi Fernando, and Sam G. Keller
4	HARVARD UNIVERSITY	Octav I. Dragoi, Evan M. O'Dorney, and Allen Yuan
5	CALIFORNIA INSTITUTE OF TECHNOLOGY	Xiangyi Huang, Zhaorong Jin, and Tian Nie

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.

MITCHELL M. LEE	Massachusetts Institute of Technology
ZIPEI NIE	Massachusetts Institute of Technology
EVAN M. O'DORNEY	Harvard University
BOBBY C. SHEN	Massachusetts Institute of Technology
DAVID H. YANG	Massachusetts Institute of Technology

THE NEXT FOURTEEN HIGHEST RANKING INDIVIDUALS

Each receives an award of \$1,000.

CALVIN DENG	Harvard University
MALCOLM J. GRANVILLE	Harvard University
LINUS U. HAMILTON	Carnegie-Mellon University
BRIAN C. HAMRICK	Massachusetts Institute of Technology
TRAVIS J. HANCE	Massachusetts Institute of Technology
XIAOYU HE	Harvard University
BUMSOO KIM	Princeton University
QINXUAN PAN	Massachusetts Institute of Technology
ERIC D. SCHNEIDER	Princeton University
THOMAS E. SWAYZE	Carnegie Mellon University
KA YU TAM	Massachusetts Institute of Technology
SZU-PO WANG	Massachusetts Institute of Technology
SAMUEL ZBARSKY	Carnegie Mellon University
TIANYOU ZHOU	Massachusetts Institute of Technology

THE NEXT SIX HIGHEST RANKING INDIVIDUALS

Each receives an award of \$250.

MATTHEW S. BRENNAN	Massachusetts Institute of Technology
MICHAEL B. COHEN	Massachusetts Institute of Technology
RAVI K. FERNANDO	Stanford University
BENJAMIN P. GUNBY	Massachusetts Institute of Technology
JIAOYANG HUANG	Massachusetts Institute of Technology
VICTOR Y. WANG	Massachusetts Institute of Technology

HONORABLE MENTION—TEAMS

BRIGHAM YOUNG UNIVERSITY
DUKE UNIVERSITY
UNIVERSITY OF CALIFORNIA, BERKELEY
UNIVERSITY OF WATERLOO
WASHINGTON UNIVERSITY, ST. LOUIS

Peter H. Baratta, Samuel J. Dittmer, and Tianyi Yang
Alex Milu, Tong Qiao, and Daniel Vitek
Indraneel G. Kasmalkar, Shiyu Li, and Qingyun Wu
Kangning (Colin) Chen, Volodymyr Lyubynets, and Hao Sun
Anthony Grebe, Patrick Lopatto, and Jongwham Park

HONORABLE MENTION—INDIVIDUALS

DHROOVA S. AIYLAM, Massachusetts Institute of Technology
JOSHUA H. ALMAN, Massachusetts Institute of Technology
ANDRE A. ARSLAN, Princeton University
ROBI C. BHATTACHARJEE, Massachusetts Institute of Technology
SIYUAN CAI, Northwestern University
HERMAN H. CHAU, Stanford University
CHARLES C. CHEN, Stanford University
KANGNING (COLIN) CHEN, University of Waterloo
YONGYI CHEN, Massachusetts Institute of Technology
PING NGAI CHUNG, Massachusetts Institute of Technology
ALEXANDER R. COLE, Massachusetts Institute of Technology
CARLOS A. CORTEZ, Massachusetts Institute of Technology
SAMUEL J. DITTMER, Brigham Young University
THAO T. DO, Stony Brook University
OCTAV I. DRAGOI, Harvard University
SAM EISENSTAT, University of Waterloo
VLAD FIROIU, Massachusetts Institute of Technology
YIBO GAO, Massachusetts Institute of Technology
ALBERT F. GU, Carnegie Mellon University
HAN HAO, New York University
LYNDON L. JI, Yale University
ZHAORONG JIN, California Institute of Technology
PAKAWUT JIRADILOK, Harvard University
SUPANAT KAMTUE, Massachusetts Institute of Technology
INDRANEEL G. KASMALKAR, University of California, Berkeley
SAM G. KELLER, Stanford University
ARCHIT U. KULKARNI, Carnegie Mellon University
AARON LANDESMAN, Harvard University

JASON M. LI, Carnegie Mellon University
KEVIN K. LI, California Institute of Technology
RAY YU LI, Carnegie Mellon University
CARL LIAN, Massachusetts Institute of Technology
DAVID J. LIU, Harvard University
ALEXANDROS MOUSATOV, Yale University
DAT P. NGUYEN, Stony Brook University
LYUBOSLAV N. PANCHEV, Stanford University
TOAN D. PHAN, Harvard University
MARIYA SARDARLI, Princeton University
JEFFREY D. SHEN, Massachusetts Institute of Technology
JEONG SOO SIM, Stanford University
LAWRENCE J. SUN, Massachusetts Institute of Technology
JONATHAN B. TIDOR, Massachusetts Institute of Technology
MAX H. TIMMONS, Massachusetts Institute of Technology
BARRY JIA HAO TNG, Harvard University
GEORGIOS VLACHOS, Massachusetts Institute of Technology
SUNG SEOB WHANG, Brown University
TIANQI WU, Massachusetts Institute of Technology
XIAO WU, Yale University
JEFFREY YAN, Harvard University
PATRICK B. YANG, Massachusetts Institute of Technology
WIJIT YANGJIT, Rensselaer Polytechnic Institute
LYNNELLE L. YE, Stanford University
QIAN YU, Massachusetts Institute of Technology
ZHIVKO N. ZHECHEV, Stanford University
ALEX J. ZHU, Massachusetts Institute of Technology
YUQI ZHU, California Institute of Technology

ELIZABETH LOWELL PUTNAM PRIZE

The winner receives an award of \$1,000.

XIAO WU

Yale University

QUESTIONS COMMITTEE

Djordje Milićević, Bryn Mawr College, Chair; Hugh Montgomery, University of Michigan, Ann Arbor; and David Savitt, University of Arizona.

A total of 4113 students from 557 colleges and universities in Canada and the United States participated in the Competition. There were teams from 430 institutions. More complete details will appear in the *American Mathematical Monthly*.

March 7, 2014 Leonard F. Klosinski, Director; Gerald L. Alexanderson and Mark Krusemeyer, Associate Directors