

Notices

of the American Mathematical Society

December 2014

Volume 61, Number 11

Almost a Century of Answering
the Question: *What Is a Mock
Theta Function?*

page 1314

Remembering Shoshichi
Kobayashi

page 1322

Math Teachers' Circles:
Partnerships between
Mathematicians and Teachers

page 1335

1

$$+ \frac{q}{(1+q)^2}$$

$$+ \frac{q^4}{(1+q)^2(1+q^2)^2}$$

$$+ \frac{q^9}{(1+q)^2(1+q^2)^2(1+q^3)^2}$$

$$+ \frac{q^{16}}{(1+q)^2(1+q^2)^2(1+q^3)^2(1+q^4)^2}$$

$$+ \frac{q^{25}}{(1+q)^2(1+q^2)^2(1+q^3)^2(1+q^4)^2(1+q^5)^2}$$

$$+ \frac{q^{36}}{(1+q)^2(1+q^2)^2(1+q^3)^2(1+q^4)^2(1+q^5)^2(1+q^6)^2}$$

$$+ \frac{q^{49}}{(1+q)^2(1+q^2)^2(1+q^3)^2(1+q^4)^2(1+q^5)^2(1+q^6)^2(1+q^7)^2}$$

$$+ \frac{q^{64}}{(1+q)^2(1+q^2)^2(1+q^3)^2(1+q^4)^2(1+q^5)^2(1+q^6)^2(1+q^7)^2(1+q^8)^2}$$

$$+ \frac{q^{81}}{(1+q)^2(1+q^2)^2(1+q^3)^2(1+q^4)^2(1+q^5)^2(1+q^6)^2(1+q^7)^2(1+q^8)^2(1+q^9)^2}$$

$$+ \frac{q^{100}}{(1+q)^2(1+q^2)^2(1+q^3)^2(1+q^4)^2(1+q^5)^2(1+q^6)^2(1+q^7)^2(1+q^8)^2(1+q^9)^2(1+q^{10})^2}$$

1

$$+ \frac{q}{(1-q)^2}$$

$$+ \frac{q^4}{(1-q)^2(1-q^2)^2}$$

$$+ \frac{q^9}{(1-q)^2(1-q^2)^2(1-q^3)^2}$$

$$+ \frac{q^{16}}{(1-q)^2(1-q^2)^2(1-q^3)^2(1-q^4)^2}$$

$$+ \frac{q^{25}}{(1-q)^2(1-q^2)^2(1-q^3)^2(1-q^4)^2(1-q^5)^2}$$

$$+ \frac{q^{36}}{(1-q)^2(1-q^2)^2(1-q^3)^2(1-q^4)^2(1-q^5)^2(1-q^6)^2}$$

$$+ \frac{q^{49}}{(1-q)^2(1-q^2)^2(1-q^3)^2(1-q^4)^2(1-q^5)^2(1-q^6)^2(1-q^7)^2}$$

$$+ \frac{q^{64}}{(1-q)^2(1-q^2)^2(1-q^3)^2(1-q^4)^2(1-q^5)^2(1-q^6)^2(1-q^7)^2(1-q^8)^2}$$

$$+ \frac{q^{81}}{(1-q)^2(1-q^2)^2(1-q^3)^2(1-q^4)^2(1-q^5)^2(1-q^6)^2(1-q^7)^2(1-q^8)^2(1-q^9)^2}$$

$$+ \frac{q^{100}}{(1-q)^2(1-q^2)^2(1-q^3)^2(1-q^4)^2(1-q^5)^2(1-q^6)^2(1-q^7)^2(1-q^8)^2(1-q^9)^2(1-q^{10})^2}$$

5

1

0

AMS
AMERICAN MATHEMATICAL SOCIETY

About the cover: Which is the good Theta, and
which is the mock? (see page 1364)

Notices

of the American Mathematical Society

December 2014

Communications

1343 Two Essays from
*Mathematicians Who Lost
Their Faces*
Shoshichi Kobayashi
Translated by Hisashi
Kobayashi

1355 Mathematical Reviews
Celebrates 75 Years
Norman Richert

1357 *Doceamus*: The Kan
Extension Seminar: An
Experimental Online
Graduate Reading Course
Emily Riehl

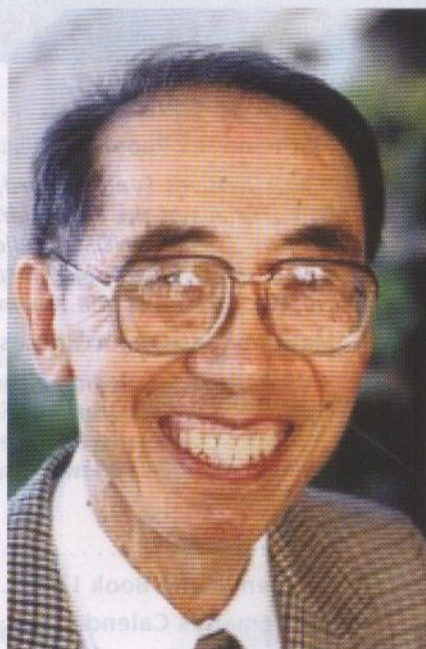
Commentary

1311 Opinion: The Burden
on Graduate School
Recommenders
Bernard Deconinck and Jan
Medlock

1345 Why Is There Philosophy of
Mathematics At All?—A Book
Review
Reviewed by John P. Burgess

1348 Ramanujan and the
Nature of Genius—A review
of the film *The Genius of
Srinivasa Ramanujan*
Reviewed by Mark Saul

1351 The Improbability Principle:
Why Coincidences, Miracles,
and Rare Events Happen
Every Day—A Book Review
Reviewed by Andrew I. Dale



We end the year with a panoply of fascinating articles. There is an exposition of the study of Ramanujan's mock theta function. Accompanying that is a review of a new film about Ramanujan. There is a study of Math Teachers' Circles and an examination of the Kan extension seminar. Finally, there is a remembrance of the distinguished complex geometer Shoshichi Kobayashi. —Steven G. Krantz, Editor

Features

1314 Almost a Century of Answering
the Question: *What Is a Mock Theta
Function?*
W. Duke

1322 Remembering Shoshichi Kobayashi
Gary R. Jensen, Coordinating Editor

1335 Math Teachers' Circles: Partnerships
between Mathematicians and Teachers
B. Donaldson, M. Nakamaye, K. Umland, and D. White

Notices

of the American Mathematical Society

EDITOR: Steven G. Krantz

ASSOCIATE EDITORS:

Krishnaswami Alladi, David Bailey, Eric Bedford, Jonathan Borwein, Susanne C. Brenner, Danny Calegari, Bill Casselman (Graphics Editor), Jennifer Chayes, Gerald Folland, Susan Friedlander, Robion Kirby, Rafe Mazzeo, Harold Parks, Mark Saul, Carla D. Savage, Steven Strogatz, James Walker

SENIOR WRITER and DEPUTY EDITOR:

Allyn Jackson

MANAGING EDITOR: Sandra Frost

PRODUCTION EDITOR: Rachel L. Rossi

CONTRIBUTING WRITER: Elaine Kehoe

CONTRIBUTING EDITOR: Randi D. Ruden

EDITORIAL ASSISTANT: David M. Collins

COMPOSITION, DESIGN, AND EDITING: Kyle

Antonevich, Anna Hattoy, Teresa Levy, Mary Medeiros, Stephen Moye, Lori Nero, Arlene O'Sean, Karen Ouellette, Courtney Rose, Donna Salter, Jennifer Wright Sharp, Deborah Smith, Peter Sykes

ADVERTISING SALES: Anne Newcomb

SUBSCRIPTION INFORMATION: Subscription prices for Volume 62 (2015) are US\$592 list; US\$473.60 institutional member; US\$355.20 individual member; US\$532.80 corporate member. (The subscription price for members is included in the annual dues.) A late charge of 10% of the subscription price will be imposed upon orders received from nonmembers after January 1 of the subscription year. Add for postage: Surface delivery outside the United States and India—US\$27; in India—US\$40; expedited delivery to destinations in North America—US\$35; elsewhere—US\$120. Subscriptions and orders for AMS publications should be addressed to the American Mathematical Society, P.O. Box 845904, Boston, MA 02284-5904 USA. All orders must be prepaid.

ADVERTISING: Notices publishes situations wanted and classified advertising, and display advertising for publishers and academic or scientific organizations. Advertising material or questions may be sent to c1assads@ams.org (classified ads) or to notices-ads@ams.org (display ads).

SUBMISSIONS: Articles and letters may be sent to the editor by email at notices@math.wustl.edu, by fax at 314-935-6839, or by postal mail at Department of Mathematics, Washington University in St. Louis, Campus Box 1146, One Brookings Drive, St. Louis, MO 63130. Email is preferred. Correspondence with the managing editor may be sent to notices@ams.org. For more information, see the section "Reference and Book List".

NOTICES ON THE AMS WEBSITE: Supported by the AMS membership, most of this publication is freely available electronically through the AMS website, the Society's resource for delivering electronic products and services. Use the URL www.ams.org/notices/ to access the Notices on the website.

[Notices of the American Mathematical Society (ISSN 0002-9920) is published monthly except bimonthly in June/July by the American Mathematical Society at 201 Charles Street, Providence, RI 02904-2294 USA, GSTNo. 121892046RT****. Periodicals postage paid at Providence, RI, and additional mailing offices. POSTMASTER: Send address change notices to Notices of the American Mathematical Society, P.O. Box 6248, Providence, RI 02940-6248 USA.] Publication here of the Society's street address and the other information in brackets above is a technical requirement of the U.S. Postal Service. Tel: 401-455-4000, email: notices@ams.org.

© Copyright 2014 by the American Mathematical Society. All rights reserved.

Printed in the United States of America. The paper used in this journal is acid-free and falls within the guidelines established to ensure permanence and durability.

Departments

About the Cover.....	1364
Mathematics People	1359
<i>Virag Receives Synge Award, Martínez Awarded Rubio de Francia Prize, Prizes of the Canadian Mathematical Society, 2014 Davidson Fellows Selected, NDSEG Fellowships Awarded, B. H. Neumann Awards Given, Klaus Peters, Maynard Awarded 2014 SASTRA Ramanujan Prize, Gurevich Receives von Kaven Award.</i>	
Mathematics Opportunities	1362
<i>AMS-AAAS Mass Media Fellowships, STaR Program for Early Career Mathematics Educators, NSF Program in Computational and Data-Enabled Science and Engineering in Mathematical and Statistical Sciences, NDSEG Fellowships, CRM Intensive Research Programs, News from IPAM.</i>	
Inside the AMS	1366
Reference and Book List	1368
Mathematics Calendar	1372
New Publications Offered by the AMS.....	1380
Classified Advertisements	1386
Meetings and Conferences of the AMS	1394
Meetings and Conferences Table of Contents.....	1404
The 2014 Notices Index	1405
San Antonio Meeting Registration Forms	1423

Opinions expressed in signed Notices articles are those of the authors and do not necessarily reflect opinions of the editors or policies of the American Mathematical Society.