

Notices

of the American Mathematical Society



August 2018

FEATURED



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The Mathematics of Cathleen Synge Morawetz

Christina Sormani, Editor



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ICM 2018 Lecture Sampler

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Graduate Student Section

*Rochelle Gutiérrez Interview
Melinda Lanius and Simone Sisneros-Thiry*

WHAT IS...Riemannian holonomy?
Jacob Gross

We remember Cathleen Morawetz, sample this month's International Congress in Rio, interview Rochelle Gutiérrez on rehumanizing mathematics, consider "WHAT IS...Riemannian holonomy?", learn about mathematics in Africa, and review *Prime Numbers and the Riemann Hypothesis*. We also remember Joe Diestel, Clarence F. Stephens, and Hans Weinberger. And just in time for the fall semester, already looming before us, Elise Lockwood reports on a strategy for teaching combinatorial counting.

—Frank Morgan, Editor-in-Chief

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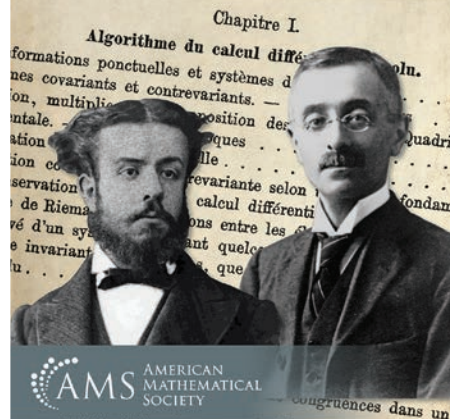
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EINSTEIN'S ITALIAN MATHEMATICIANS

RICCI, LEVI-CIVITA, AND THE BIRTH OF GENERAL RELATIVITY

Judith R. Goodstein



AVAILABLE IN
EBOOK FORMAT

Galileo said that mathematics is the language of nature. Einstein might have found himself mute when it came to describing gravity if it weren't for the mathematics of covariant derivatives developed by Galileo's countrymen Gregorio Ricci-Curbastro and Tullio Levi-Civita. Judy Goodstein tells their stories and their connection to Einstein with clarity and grace in a most readable book.

—Barry Simon, California Institute of Technology

This volume chronicles the lives and intellectual contributions of Italian mathematician Gregorio Ricci and his brilliant student Tullio Levi-Civita, including letters, interviews, memoranda, and other personal and professional papers, to tell the remarkable, little-known story of how two Italian academicians, of widely divergent backgrounds and temperaments, came to provide the indispensable mathematical foundation—today known as the tensor calculus—for general relativity.

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