Abstracts

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The purpose of this department is to give sufficient information about the subject matter of each publication to enable users to decide whether to read it. It is our intention to cover all books, articles, and other materials in the field.

Books for abstracting and eventual review should be sent to this department. Materials should be sent to Duncan J. Melville, Department of Mathematics, Computer Science and Statistics, St. Lawrence University, Canton, NY 13617, U.S.A. (e-mail: `dmelville@ stlawu.edu`).

Readers are invited to send reprints, autoabstracts, corrections, additions, and notices of publications that have been overlooked. Be sure to include complete bibliographic information, as well as transliteration and translation for non-European languages. We need volunteers willing to cover one or more journals for this department.

In order to facilitate reference and indexing, entries are given abstract numbers which appear at the end following the symbol #. A triple numbering system is used: the first number indicates the volume, the second the issue number, and the third the sequential number within that issue. For example, the abstracts for Volume 40, Number 1, are numbered: 40.1.1, 40.1.2, 40.1.3, etc.

The initials in parentheses at the end of an entry indicate the abstractor. In this issue there are abstracts by Laura Martini, Kim Plofker, and Duncan J. Melville.

General

Agarwal, Ravi P.   *See* #44.4.17.

Anosova, Joanna.   *See* #44.4.20.

Aydin, Emin; Delice, Ali; and Demiroğlu, Derya.   An analysis of history of mathematics research literature in Turkey: The mathematics education perspective. *British Society for the History of Mathematics Bulletin* **31** (3) (2016), 215–229. From the abstract: "The present paper aims to describe the patterns in the history of mathematics research in Turkey and to analyse the research in Turkey using a mathematics education framework". (DJM)   #44.4.1

Barco, Luiz.   *See* #44.4.5.

Capecchi, Danilo.   *The Problem of the Motion of Bodies. A Historical View of the Development of Classical Mechanics* (*History of Mechanism and Machine Science* **25**). Cham: Springer, 2014, xii+554 pp. This volume discusses the roots of the problem of the motion of bodies and shows how the definitions of basic

physical quantities such as time, space, body, force, power, work, action, inertia, impulse emerged in the development of human knowledge. It also links the attempts by scholars to explain the natural phenomena with the thinking of their time. See the review by Giuseppe Claudio Ruta in *Mathematical Reviews* 3524650. (LM) #44.4.2

Cormack, Lesley B.; Walton, Steven A.; and Schuster, John A., eds. *Mathematical Practitioners and the Transformation of Natural Knowledge in Early Modern Europe* (*Studies in History and Philosophy of Science* **45**). Cham: Springer, 2017, xii+203 pp. This book discusses transformations of nature studies in the Scientific Revolution by means of the interaction between practitioners and scholars, focusing in particular on the connection between theory and practice in the area of mathematics. (LM) #44.4.3

Delice, Ali. *See* #44.4.1.

Demidov, S.S.; Tikhomirov, V.M.; and Tokareva, T.A. The Moscow Mathematical Society and the development of mathematics in Russia (on the 150th anniversary of the Society's creation). *Transactions of the Moscow Mathematical Society* (2016), 127–148. A history of the Moscow Mathematical Society, founded in 1864, from its birth to the present, considering both mathematical development as well as social and political context. See the review by Roman Murawski in *Zentralblatt MATH* 1360.01045. (DJM) #44.4.4

Demiroğlu, Derya. *See* #44.4.1.

Ferreira Nascimento, Marcio Luis; and Barco, Luiz. The man who loved to count and the incredible story of the 35 camels. *Journal of Mathematics and the Arts* **10** (1–4) (2016), 35–43. In honor of the 120th anniversary of the birth of Brazilian mathematics teacher Julio Cesar de Mello e Souza (1895–1974). Among his vast output of tales and recreational mathematics, mostly published under the pen name Malba Tahan, the authors choose the riddle of 35 camels to be divided between three sons in certain proportions and explore the history of this problem. (DJM) #44.4.5

Forbes-Macphail, Imogen. "I shall in due time be a poet": Ada Lovelace's poetical science in its literary context, in #44.4.10, pp. 143–168. From the review: "a series of thoughtful reflections on Ada Lovelace as a poet and a programmer that explores such topics as the poetic qualities of mathematics, language as a new form of reality, and the possibility that computers might become creative agents." See the review by Jeremy Gray in *Mathematical Reviews* 3524305. (DJM) #44.4.6

Fothe, Michael; and Zimmermann, Bernd, eds. *Zur Geschichte der Mathematik in Jena. Wurzeln strukturwissenschaftlichen Denkens. Beiträge zu einem Kolloquium der Abteilung für Didaktik der Mathematik und Informatik anlässlich des 450-jährigen Bestehens der Universität Jena* [*On the History of Mathematics in Jena. Roots of Structural-scientific Thinking. Contributions to a Colloquium of the Department of Didactics of Mathematics and Informatics on the Occasion of the 450th Anniversary of the University of Jena*] (*Schriftenreihe des Frege Centre for Structural Sciences* **1**). Jena: IKS Garamond, 2009, 80 pp. A collection of papers on the history of mathematical thinking at Jena on the occasion of its 450th anniversary. The individual articles are listed or abstracted separately as: #44.4.54; #44.4.86; #44.4.99; and #44.4.107. (DJM) #44.4.7

François, Karen; and Vandendriessche, Eric. Reassembling mathematical practices: a philosophical-anthropological approach. *Revista Latinoamericana de Etnomatemática* **9** (2) (2016), 144–167. A discussion of the use of Wittgensteinian philosophy to explore culturally different mathematical practices and its application in particular as a lens in approaching ethnomathematics. The authors illustrate with evidence of a mathematical rationality in a comparison of divergent practices of string figure-making and sand-drawing. (DJM) #44.4.8

Grenzebach, Gerrit; and Habermann, Katharina. Das Zentralarchiv für Mathematiker-Nachlässe [The central archive for mathematicians' Nachlässe]. *Mitteilungen der Deutschen Mathematiker-Vereinigung* **24**