

Abstracts

Abstracts

Duncan J. Melville, Editor

Laura Martini and Kim Plofker, Assistant Editors

Available online 3 February 2016

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 30, Number 1, are numbered: 30.1.1, 30.1.2, 30.1.3, etc.

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

General

Abeles, Francine F. Logic and Lewis Carroll. *Nature* **527** (2015), 302–304. As *Alice's Adventures in Wonderland* turns 150, Abeles gives an overview of the mathematical work and legacy of its author. (DJM) #43.2.1

Andersen, Lars Døvling. Latin squares, in #43.2.20, pp. 251–283. In this paper, the author gives a survey of Latin squares from their first appearance, through the work of Euler, to modern generalizations and applications in art and literature. See the review by Victor V. Pambuccian in *Zentralblatt MATH* 1321.01007. (DJM) #43.2.2

Andrews, George E. Partitions, in #43.2.20, pp. 205–229. A survey first of the theory of partitions of integers from Leibniz through Euler to Sylvester and N.M. Ferrar, and then a history of the use of

partitions of other mathematical objects. See the review by Reinhard Siegmund-Schultze in *Zentralblatt MATH* 06296837. (DJM) #43.2.3

Aroca, J.M. Articulated systems: Kempe's theorem. *Revista del Seminario Iberoamericano de Matemáticas* 4 (2) (2013), 19–53. A survey examining linkages to draw algebraic curves. Analyzes work on linkages from Plato and Proclus to Watt, Evans, White, Peaucellier, Lipkin, Chebyshev, and Hart. A conclusion to the question on linkages used as drawing instruments is in Kempe's Theorem of 1875. See the review by Victor V. Pambuccian in *Mathematical Reviews* 3333704. (JB) #43.2.4

Aydin, Nuh; and Hammoudi, Lakhdar. Root extraction by Al-Kāshī and Stevin. *Archive for History of Exact Sciences* 69 (3) (2015), 291–310. Examines and compares al-Kāshī's and Stevin's methods for extraction of square and fifth roots. Stevin's is an example of the algorithm, while al-Kāshī's is more an experimentation. See the review by Jens Høyrup in *Mathematical Reviews* 3336949. (JB) #43.2.5

van Benthem, Johan, et al., eds. *Proof, Computation and Agency. Logic at the Crossroads (Synthese Library 352)*. Dordrecht: Springer, 2011, xxiv+370 pp. Two papers on history of Indian logic are abstracted separately as: #43.2.27 and #43.2.28. (KP) #43.2.6

Bertato, Fábio Maia. A filosofia da matemática de Popper [Popper's philosophy of mathematics]. *Revista Brasileira de História da Matemática. An International Journal on the History of Mathematics* 10 (20) (2010), 217–226. This paper presents some ideas that constitute what is called Popper's philosophy of mathematics. (LM) #43.2.7

Bourdeau, Michel. See #43.2.17.

do Carmo Toledo, José. Sobre o processo histórico de institucionalização da área de análise matemática no Brasil [On the historical process of institutionalization of mathematical analysis in Brazil]. *Revista Brasileira de História da Matemática. An International Journal on the History of Mathematics* 11 (22) (2011), 193–218. This article discusses the process of institutionalization of mathematical analysis in Brazil. It focuses on some social practices within the community of Brazilian analysts. (LM) #43.2.8

Fyfe, Aileen; McDougall-Waters, Julie; and Moxham, Noah. 350 years of scientific periodicals [Guest editorial]. *Notes and Records. The Royal Society Journal of the History of Science* 69 (3) (2015), 227–239. The introduction to a special issue of *Notes and Records* celebrating 350 years of the *Philosophical Transactions* of the Royal Society surveys the history of the journal. (DJM) #43.2.9

Gebhardt, Rainer. *Arithmetik, Geometrie und Algebra der frühen Neuzeit [Arithmetic, Geometry and Algebra of the Early Modern Period]* (*Schriften des Adam-Ries-Bundes Annaberg-Buchholz* 23). Proceedings of the Scientific Colloquium held in Annaberg-Buchholz, April 11–13, 2014. Annaberg-Buchholz: Adam-Ries-Bund e.V., 2014, viii+415 pp. Proceedings of the seventh colloquium on early modern mathematics held in Annaberg-Buchholz in 2014. The individual papers are listed separately as: #43.2.52; #43.2.59; #43.2.61; #43.2.62; #43.2.63; #43.2.64; #43.2.65; #43.2.67; #43.2.68; #43.2.69; #43.2.72; #43.2.73; #43.2.74; #43.2.75; #43.2.76; #43.2.77; #43.2.78; #43.2.79; #43.2.80; #43.2.81; #43.2.82; #43.2.83; #43.2.86; #43.2.91; #43.2.95; #43.2.100; #43.2.101; #43.2.102; and #43.2.113. See the review by Volker Peckhaus in *Mathematical Reviews* 3223082. (DJM) #43.2.10

Hammoudi, Lakhdar. See #43.2.5.

Knuth, Donald E. Two thousand years of combinatorics, in #43.2.20, pp. 3–37. A characteristically Knuthian survey of combinatorics, taking in hexagrams from the *I Ching*, Sanskrit prosody, trees, and Japanese incense games. See the review by Jean-Claude Martzloff in *Zentralblatt MATH* 1323.01005. (DJM) #43.2.11

Download English Version:

<https://daneshyari.com/en/article/1158350>

Download Persian Version:

<https://daneshyari.com/article/1158350>

[Daneshyari.com](https://daneshyari.com)