

REVIEWS

The Association for Symbolic Logic publishes analytical reviews of selected books and articles in the field of symbolic logic. The reviews were published in *The Journal of Symbolic Logic* from the founding of the JOURNAL in 1936 until the end of 1999. The Association moved the reviews to this BULLETIN, beginning in 2000.

The Reviews Section is edited by Steve Awodey (Managing Editor), John Burgess, Mark Colyvan, Anuj Dawar, Steffen Lempp, Rahim Moosa, Ernest Schimmerling, Alex Simpson, Kai Wehmeier, and Matthias Wille. Authors and publishers are requested to send, for review, copies of books to *ASL, Box 742, Vassar College, 124 Raymond Avenue, Poughkeepsie, NY 12604, USA*.

In a review, a reference “JSL XLIII 148,” for example, refers either to the publication reviewed on page 148 of volume 43 of the JOURNAL, or to the review itself (which contains full bibliographical information for the reviewed publication). Analogously, a reference “BSL VII 376” refers to the review beginning on page 376 in volume 7 of this BULLETIN, or to the publication there reviewed. “JSL LV 347” refers to one of the reviews or one of the publications reviewed or listed on page 347 of volume 55 of the JOURNAL, with reliance on the context to show which one is meant. The reference “JSL LIII 318(3)” is to the third item on page 318 of volume 53 of the JOURNAL, that is, to van Heijenoort’s *Frege and vagueness*, and “JSL LX 684(8)” refers to the eighth item on page 684 of volume 60 of the JOURNAL, that is, to Tarski’s *Truth and proof*.

References such as 495 or 280I are to entries so numbered in *A bibliography of symbolic logic* (the JOURNAL, vol. 1, pp. 121–218).

Motivic integration and its interactions with model theory and non-Archimedean geometry, Volumes I and II, edited by Raf Cluckers, Johannes Nicaise and Julien Sebag, London Mathematical Society Lecture Note Series, 383 and 384. Cambridge University Press, Cambridge, 2011, 346 and 262 pp.

Motivic Integration is a name for a whole collection of new techniques that originated from a talk by M. Kontsevich in 1995. As in any fast-developing subject, the literature is difficult to track, and there is hardly any exposition of the newer aspects of motivic integration. In this situation, these two volumes that resulted from a conference held in Edinburgh in 2008 provide an invaluable resource.

In fact, Volume I reads not so much as a conference proceedings, but as a book—it is a very thoughtful collection of high-level introductory articles, aimed at the exposition of some of the theories of motivic integration, explaining the links between them, and providing the necessary background. Remarkably, it features efficient exposition of the lesser-known aspects of the theory, while avoiding repetitions and overlaps with the prior introductory literature. It also includes some developments that happened after 2008 (since the contributors to these volumes are among the main contributors to the development of the subject).

Volume II, more in the conference-proceedings style, is a far-reaching collection of articles related to some of the fields where the philosophy of motivic integration found applications, such as Arakelov Geometry, cf. Chapter 9 “*Heights and measures on analytic spaces. A survey*