

point boundary value problem to a regular one by means of Riccati transformations," EUT-report 83-WSK-04, Eindhoven, 1983.)

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Derivatives, nuclei and dimensions on the frame of torsion theories, by Jonathan S. Golan and Harold Simmons. Pitman Research Notes in Mathematics Series no. 188, Longman Scientific & Technical, Harlow, U.K. (co-published in the United States with John Wiley & Sons Inc., New York), 1988, 120 pp., \$44.95. ISBN 0-582-03448-5

This monograph is remarkable not so much for the new results which it contains, as for the fusion of two hitherto separate traditions which it represents: the algebraic tradition of studying non-commutative rings via their module categories (and more particularly via localizations of the latter), and the lattice-theoretic study of frames and their nuclei, whose main inputs have come from logic and category theory (particularly topos theory).

In one sense, it comes as no surprise that these two traditions should have coalesced. As Borceux and Kelly [1] have shown, the localizations of any well-behaved category have a natural tendency to form a frame in their canonical ordering (incidentally, it seems odd that [1] does not appear among the references of the book under review). Also, in the representation theory of commutative rings the utility of frames is well understood (see [6, Chapter 5] for a survey; the key point is that in the commutative case one can pass directly from a ring to its frame of radical ideals and the other frames associated with it, without having to go by way of the module category). However, in the noncommutative case there has until recently been a noticeable lack of communication between ring theory and frame theory: the subjects have been advanced by disjoint sets of people (with the notable exception of J. Lambek; however, his work on rings [7] predates his interest in categorical logic, and does not use techniques from the latter), and have developed distinct traditions of terminology and notation. (Although the present book makes a start on bridging the