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A note on prime ideal principle in lattices. (English) Zbl 1351.06003
Asian-Eur. J. Math. 8, No. 2, Article ID 1550024, 12 p. (2015).

Authors' abstract: In this paper, we introduce a prime ideal principle (PIP) in lattices and use it to prove that certain ideals in lattices are prime ideals. Moreover, our results yield a unification of known results of *M. H. Stone* [Trans. Am. Math. Soc. 40, 37–111 (1936; Zbl 0014.34002; JFM 62.0033.04)], *V. A. Gorbunov* and *V. I. Tumanov* [Algebra Univers. 16, 250–252 (1983; Zbl 0516.06006)], *Y. Rav* [J. Pure Appl. Algebra 56, No. 2, 105–118 (1989; Zbl 0665.06006)] etc. on prime ideals.

Reviewer: Marcel Wild (Stellenbosch)

MSC:

06B10 Lattice ideals, congruence relations
06D75 Other generalizations of distributive lattices

Cited in 2 Documents

Keywords:

distributive lattice; 0-distributive lattice; prime ideal; “maximum implies prime” principle

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References:

- [1] Anderson D. D., Acta Sci. Math. (Szeged) 59 pp 61– (1994)
- [2] DOI: 10.1215/S0012-7094-50-01704-2 · Zbl 0041.36408 · doi:10.1215/S0012-7094-50-01704-2
- [3] DOI: 10.1023/A:1008611926427 · Zbl 0980.08001 · doi:10.1023/A:1008611926427
- [4] DOI: 10.1007/BF01191774 · Zbl 0516.06006 · doi:10.1007/BF01191774
- [5] Grätzer G., General Lattice Theory (1998)
- [6] Grätzer G., Acta. Sci. Math. (Szeged) 19 pp 82– (1958)
- [7] DOI: 10.1007/BF02066675 · Zbl 0115.01901 · doi:10.1007/BF02066675
- [8] Jayaram C., Indian J. Pure Appl. Math. 17 pp 331– (1986)
- [9] DOI: 10.2478/s11533-013-0206-z · Zbl 1288.06002 · doi:10.2478/s11533-013-0206-z
- [10] Joshi V., Math. Bohem. 130 pp 73– (2005)
- [11] Kaplansky I., Commutative Rings (1974)
- [12] DOI: 10.3792/pja/1195522165 · Zbl 0144.25401 · doi:10.3792/pja/1195522165
- [13] DOI: 10.1016/j.jalgebra.2007.07.016 · Zbl 1168.13002 · doi:10.1016/j.jalgebra.2007.07.016
- [14] Pawar Y. S., Acta Univ. Palack. Olomuc. Fac. Rerum Natur. Math. 49 pp 63– (2010)
- [15] Pawar Y. S., Indian J. Pure Appl. Math. 24 pp 435– (1993)
- [16] DOI: 10.4153/CMB-1978-080-6 · Zbl 0413.06002 · doi:10.4153/CMB-1978-080-6
- [17] DOI: 10.1016/0022-4049(89)90140-0 · Zbl 0665.06006 · doi:10.1016/0022-4049(89)90140-0
- [18] DOI: 10.1017/S1446788700010715 · Zbl 0242.13003 · doi:10.1017/S1446788700010715
- [19] Stone M. H., Trans. Amer. Math. Soc. 40 pp 37– (1936)
- [20] Thakare N. K., J. Indian Math. Soc. 71 pp 13– (2004)
- [21] Varlet J., Bull. Soc. Roy. Sci. Liège 37 pp 149– (1968)
- [22] DOI: 10.1007/s11083-004-2862-x · doi:10.1007/s11083-004-2862-x

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