(1) On the number of join irreducibles and acyclicity in finite modular lattices. Algebra Universalis 64 (2010), no. 3-4, 433–444.

As observed by Fred Wehrung, the definition of ‘cycles’ does not give the right concept in the case $n = 3$: Here, one has to required that one has 3 distinct intersection points for the 3 lines.


(7) On the equational theory of the projection lattices of finite von Neumann algebra factors. Note di matematica e fisica (Cerfim Locarno), 22 (2009), 53–65


In case of rings without unit, ‘artinian’ should read ‘artinian and neotherian’


This paper attempts a characterization of lattices that can be represented as the lattice of submodules of a finitely generated module over a completely primary uniserial ring (which would include the subgroup lattices of finite abelian groups). The
result as stated in the paper is not correct. Indeed, the authors have subsequently noted that a counter-example is provided by G. S. Monk [Pacific J. Math. 30 (1969), 175–186. Monk’s example is a primary Arguesian lattice of geometric dimension 2 that cannot be represented as the lattice of submodules of a module over a completely primary uniserial ring. Reviewed by James B. Nation

The problem is the ‘obvious’ Lemma 1.1. and its application in Sect.9. The results of Sect. 2–8 do not depend on Lemma 1.1 or only on valid special cases. In the paper there are also combinatorial results on semiprimary lattices and their skeletons. Here, references should be give to G. P. Tesler. Semi-primary lattices and tableau algorithms.


(13) H., mit R. Langsdorf, Frankl’s Conjecture for lower semimodular lattices.


In this note is has been conjectured that every variety of modular ortholattices is generated by its finite dimensionsional members. This would imply a conjecture of Gunter Bruns that any variety of modular ortholattices is either 2-distributive of contains a simple 3-dimensional member: Bruns, Gunter Varieties of modular ortholattices. Houston J. Math. 9 (1983), no. 1, 1–7.

For none of these conjectures there have been supplied any good reasons. Rather, one should conjecture that any variety of modular ortholattices is either n-distributive for some n or contains a subvariety not containing any simple 3-dimensional members.

(17) H.; Luksch, Peter; Skorsky, Martin; Wille, Rudolf, Algebras of semiconcepts and double Boolean algebras. Contributions

The decision problem for the equational theory is PSPACE-complete according to Philippe Balbiani: http://cie2011.fmi.unisofia.bg/files/slides/Balbiani.pdf

(18) H.; Roddy M: Proatomic modular ortholattices: Representation and equational theory, Note di matematica e fisica (Cerfim Locarno), 10 (1999), 55–88


Thanks are due to Luc Segufin, who obeserved that Theorem 16 is not in the quoted reference (and most likely not in any other) and that the given proof was vacuous. A correct proof has been given in


(25) On forbidden minors for matroids representable in finite characteristic


In the definition of ‘base of lines’ on p.380 it should read ‘$\Lambda_M$-compatible’ where $\Lambda_M$ is the set of all lines of $M$.

As observed by Fred Wehrung, the definition of ‘cycles’ does not give the right concept in the case $n = 3$: Here, one has to required that one has 3 distinct intersection points for the 3 lines. He also observed that, contrary to the claim on top
of page 367, for general geometries, the join irreducibles of the
subspace lattice may result into a non-isomorphic geometry.
An elaborate presentation of all material in the paper is being
prepared by Fred Wehrung.

(27) Galois lattices, Note di matematica e fisica (Cerfim Locarno),
7 229–234, (1992)

(28) On the contraction of vectorial lattice representations. Order 8
The proof of Lemma 4 breaks down at the first step of the
induction. A counterexample to Thm.1 is provided in the below
erratum. The problem open in all its variations.
Erratum: "On the contraction of vectorial lattice represen-
tations” Order 22 (2005), no. 1, 83–84. Summary: "An iso-
metric sublattice on a six-dimensional vector space lattice is
constructed having a congruence relation such that the factor
lattice does not admit any representation via contraction.”
The conjecture has been shown to fail for the class of sub-
module lattices over certain rings, see
Czédli, Gábor; Hutchinson, George An irregular Horn sen-

(29) H.; Wild, Marcel, Acyclic modular lattices and their represen-
The proof of Thm.6.4 left out some details which are now
provided in: On the number of join irreducibles and acyclicity
in finite modular lattices. Algebra Universalis 64 (2010), no.
3-4, 433–444.
Also, as observed by Fred Wehrung, the definition of ‘cycles’
does not give the right concept in the case \( n = 3 \): Here, one has
to required that one has 3 distinct intersection points for the 3
lines.

1, 85–101.
Thanks are due to Tamás Schmidt for observing that Lemma
2.1 is erroneous. A more detailed consideration provides a cor-
correct proof of Lemma 3.3; see
Corrigendum: "Gluings of modular lattices” Order 23 (2006),
no. 2-3, 169–171.


(32) Gross, Herbert; Herrmann, Christian; Moresi, Remo, The clas-
sification of subspaces in Hermitian vector spaces. J. Algebra


Hilfsatz 6.4 is not correct. It has been replaced in the following by a reasoning closer to the structure to be considered. On perfect pairs for quadruples in complemented modular lattices and concepts of perfect elements. Algebra Universalis 61 (2009), no. 1, 1–29.


As pointed out by Günter Bruns, the ultraproduct construction has not the required properties. It remains open, whether pure injective hulls would work, here. A valid construction within Hilbert space has been given in: Bruns, Günter; Roddy,


The subdirect decomposition claimed in the paper is not valid: E.g. the subgroup lattice of \( \mathbb{Z} \times (\mathbb{Z}/(p^2))^3 \) yields a counterexample with 4 generators chosen similarly as in the following (without any strange glueing): On the word problem for the modular lattice with four free generators. Math. Ann. 265 (1983), no. 4, 513–527.


In von Neumann frames, the perspectivities between base elements should be given by elements denoted in the form \((\ldots, 0, x, 0, \ldots, 0, -x, 0, \ldots)\); equivalently, one may consider only the prespecivities between the first base element and the others given by \((x, 0, \ldots, 0, -x, 0, \ldots)\) and obtain the remaining ones by the normalization condition of von Neumann; cf. Frames of permuting equivalences. Acta Sci. Math. (Szeged) 51 (1987), no. 1–2, 93–101.


(56) H.; Kindermann, Margarete; Wille, Rudolf On modular lattices generated by \( 1 + 2 + 2 \). Algebra Universalis 5 (1975), no. 2, 243–251.


The last sentence of Theorem 9 is incorrect. Also, Ralph Freese has shown, contrary to the claim in Thm.5, that the lattice of subspaces of an \( nn \)-dimensional vector space over \( GF(p) \) is a projective modular lattice if \( p \) is a prime and \( n \geq 4 \):


(63) Weak projective radius and finite equational bases for classes of lattices, Algebra Universalis 3(1973), 51-58

(64) \( S \)-verklebte Summen von Verbänden. (German) Math. Z. 130 (1973), 255–274.
