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# Open problems from NCS 2018

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## Abstract

All participants in the workshop NCS 2018 were invited to submit a list of open problems, typically problems relevant to the subject matter of their talk. These problems follow, grouped according the particular individual presenting them. These individuals appear with their problem sets in alphabetical order, the sole exception being that the Honoree of the workshop appears first. Some of the presenters give a bit of background to accompany their problems. In other cases, such as myself, the presenter assumes that enough background was given in their talk as published herein. Thus the reader is invited to refer back to the relevant article. It is hoped that in the months to follow some of these problems will be solved, or at least, considerable light will be shed on them.

*Keywords:* Skew lattice, ring, primitive skew lattice, dual congruence distributivity, orthodox semi-group, sheaf representation, left regular band, quasilattice, paralattice, covering lattice, skew Boolean algebra, congruence lattice, antilattice, skew Heyting algebra, coset structure, comodernistic lattice.

*Math. Subj. Class.:* 06A75, 06B20, 06B75

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# Odprti problemi z NCS 2018

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## Povzetek

Vsi udeleženci delavnice NCS 2018 so bili povabljeni, da predložijo seznam odprtih problemov, praviloma vezanih na njihovo predavanje. Navedeni so prejeti problemi, ki so združeni v sklope glede na posameznika, ki jih je predstavil. Ti sklopi so razvrščeni po abecednem vrstnem redu glede na ime avtorja, z izjemo sklopa častnega udeleženca, ki nastopa prvi. Nekateri udeleženci so svoje probleme opremili z ozadjem. V drugih primerih, kakor denimo v mojem, avtor predpostavlja, da je ozadje v zadostnem obsegu podano v predavanju, ki je objavljeno na tem mestu. Bralcu torej vabimo, da primerja problem z ustreznim člankom. Upamo, da bodo navedeni problemi rešeni v prihodnjih mesecih, oziroma da bo vsaj prišlo do znatnih novih uvidov vanje.

*Ključne besede:* Poševna mreža, kolobar, primitivna poševna mreža, dualna kongruenčna distributivnost, ortodoksnal polgrupa, upodobitev s snopi, levo regularen pas, kvazimreža, paramreža, krovna mreža, poševna Boolova algebra, kongruenčna mreža, antimreža, poševna Heytingova algebra, odsekovna struktura, komodernistična mreža.

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