

Congruence regularity and its generalizations

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In regular algebras, every congruence relation is uniquely determined by each of its classes, thus also every class containing a given element is uniquely determined by any other class. For weakly regular algebras with a constant 0, every class is determined by the class containing 0 and, vice versa, for locally regular algebras, the class containing 0 is determined by every other congruence class. This scheme motivated us to find a general concept of dependency of congruence classes which can be applied not only to the afore mentioned cases but also for other modifications of congruence regularity.

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- [2] Chajda I., Eigenthaler G., Länger H.: *Congruence Classes in Universal Algebra*, Research and Exposition in Mathematics, Volume 26, Heldermann Verlag, Lemgo 2003
- [3] Chajda I., Eigenthaler G., Länger H.: *Determined congruence classes*, Contributions to General Algebra 14, Verlag Johannes Heyn, Klagenfurt 2004, 21-28

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