## Polynomial completeness properties of Mal'cev algebras with (SC1)

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In the characterization of various types of polynomial completeness for algebras in congruence modular varieties we often encounter conditions that involve congruences, the binary term condition commutator and the centralizer. In this talk, we will discuss the properties of the finite algebras with a Mal'cev polynomial that satisfy a condition known in the literature as (SC1).

In particular, we will show how partial functions that preserve the congruences of a finite Mal'cev algebra with (SC1) can be interpolated by a polynomial function, and we will give a characterization of strictly 1-affine completeness for finite congruence regular Mal'cev algebras.

Part of the work presented in this talk is based on an unpublished manuscript by E. Aichinger and P. Idziak.

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