

Další seminář z algebry se koná 1.4.2021 od 13.00 online na platformě [ZOOM](#). Informace pro připojení a další program semináře je [zde](#).

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C-Varieties of Ordered and Quantitative Algebras

Abstrakt:

Mardare, Panangaden and Plotkin introduced c-varieties of algebras on metric spaces. These are categories of metric-enriched algebras specified by equations in a context. A context puts restrictions on the distances of variables one uses. We prove that c-varieties are precisely the monadic categories over  $\text{Met}$  for countably accessible enriched monads preserving epimorphisms.

We analogously introduce c-varieties of ordered algebras as categories specified by inequalities in a context. Which means that conditions on inequalities between variables are imposed. We prove that c-varieties precisely correspond to enriched finitary monads on  $\text{Pos}$  preserving epimorphisms.

This is joint work with Jiri Rosicky.