

We will continue online on Thursday, **April 1st, at 1pm on [ZOOM](#) platform** (for information how to access seminar and next programme visit

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) by the talk:

Jiří Adámek

C-Varieties of Ordered and Quantitative Algebras

Abstract:

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 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 Pos preserving epimorphisms.

This is joint work with Jiri Rosicky.