Partial relation extensions

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It is well-known that cluster-tilted algebras introduced by Buan, Marsh and Reiten can equivalently be described as relation extensions, that is, trivial extensions of a tilted algebra C by its relation bimodule E. Also, any complete slice in modC embeds as a local slice in the module category of the cluster tilted algebra.

The objective of this talk is to introduce an intermediate class of algebras, called partial relation extensions, where E is replaced by one of its direct summands E'. Our main results show how one can compute the bound quiver and the module category of a partial relation extension. We also prove that a complete slice in modC embeds as local slice in the module category of its partial relation extensions.

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