

Span(Graph) and Minimal Realization

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Recently Katis, Sabadini and Walters have proposed the bicategory of spans of directed graphs as a suitable algebra for concurrent computation. For spans of (multi-) pointed reachable graphs a suitable notion of behaviour is the span whose head is the tree (forest) obtained by ‘unfolding’. We describe a minimal realization theory (= lax local right adjoint) for this setting and relate it to the bisimulations of concurrency theory.

*Joint work with N. Sabadini and R. F. C. Walters.