

Inference from the paper:

* The key importance of this paper is, we can work on different domains individually and combine the result without affecting the other domains.

→ This method is called as compositional modelling.

* There are three types of compositional modelling.

(i) Model semantics: concrete mathematical models.

(ii) ^{composition} Syntax: interactions between system

(iii) Composition rule: how to compose i.e. rule

* Model semantics just assigns meaning to the object but composition axiomatizes the rule.



"Span" = multirelotion pairs of element
may be related with multiplicity.
Why is it important? when there are
multiple tokens of the same species.

* We define petrinets as closed systems meaning it exists independently. Non-compositional modelling focuses on implementing closed systems.

So, structured cospans & decorated cospans change ~~of~~ closed → open.

Structured multicospan of Petri-nets =

A list of finite sets A_1, \dots, A_n and the $A_1 \rightarrow S, \dots, A_n \rightarrow S$.

A_i is the ^{foot} ~~leg~~ of multicospan and