Graph models

- **general graph drawing tool**
  - enable analyses
  - different styles (profiles?) for displaying graphs
    - petri nets, UML diagrams etc

- **meta-description**
  - meta-graphs meta-describe other graphs
    - cf magritte
  - graph semantics
    - structure
      - schema or meta model
        - also a graph
    - behavior
      - graph transformations
        - graph grammars?
        - separate static and dynamic aspects
          - eg petri nets and markings

- **representation**
  - RDF and 3-tuples?
    - subject - attribute - object
    - directed graphs
    - unique node names?

- **applications**
  - architecture diagrams
    - component diagrams in embedded systems
      - forbid cyclic dependencies
  - state machines
    - Petri nets
      - execution
      - analysis
    - statecharts
    - FSP
    - Markov chains
  - UML class diagrams
    - refinement
    - refactoring

- **Language**
  - DSLs
    - for defining graphs
      - FSAs
      - Petri nets
      - ...
  - Abstraction
    - need way of raising abstraction level
      - an association (edge) with properties becomes a subject (node)
      - express higher level graphs using the HL abstractions
  - define semantics in formal (non-visual) language

- **Related**
  - AGG
    - triple graph grammars
  - eToys
  - program transformation
  - coalgebras?
    - as generic state machine models?

/ Graph models / representation / RDF and 3-tuples?

http://en.wikipedia.org/wiki/Resource_Description_Framework

/ Graph models / applications / state machines / Markov chains

http://en.wikipedia.org/wiki/Markov_chain