Hazel ExoLivelits

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Computational Glue

- Good ideas and good GUIs need good computational glue
- The best computational substrate is a general purpose programming language
- While text is powerful, it should be one of many media in a richer compositional toolbox

Livelits - Compositional GUIs in code

- **Hazel**: Our programming language and live programming environment
- **Livelits***: Our API for creating user interfaces for domain data structures, which expand under the hood into Hazel syntax
- **ExoLivelits**: New work, embedding external apps as Livelits

*See our paper: Filling Typed Holes with Live GUIs, PLDI2021

Hazel + Petrinaut Demo

- Featuring **HASH**'s Petrinaut

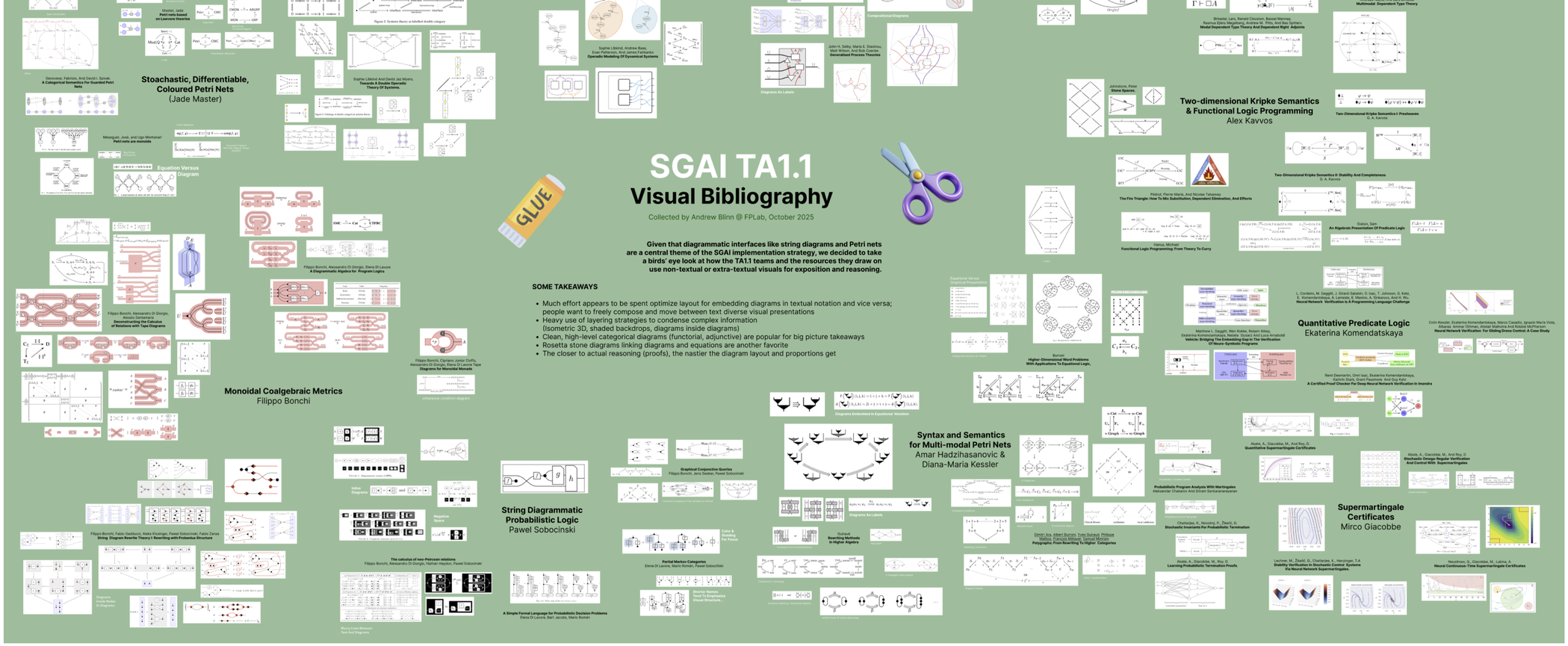
Computational Commons + GAIOS

- Working in a general purpose programming language shouldn't compromise working with your system in an expressive way
- Beyond this demo our vision for Hazel is as a **computational commons:** 100s of libraries of expressive interactives supporting large scale collaboration between humans and AIs.
- We are experimenting with Ink & Switch on embedding Hazel into the GAIOS platform

Semantic Context Engineering

- Within GAOIS and SGAI we want Hazel to act as computational glue, using its semantics engine to help drive both human-oriented interfaces and AI tool use and context engineering
- Our AI thesis: Agents should be able to interact with code *as code* as opposed to merely text*, using formal semantics to build context and contextually suggest actions
- Our hope is that **even if you don't want to write Hazel code** (gasp), our structured semantics will help LLMs write the glue for you, and help them use our live programming features to explain their work

*For preliminary work, see our paper:
Statically Contextualizing Large Language Models with Typed Holes, OOPSLA2024



- We'd love to work with you to experiment with embedding your modelling tools into Hazel, or Hazel into your tools.
- Talk to Cyrus or myself for more demos or details.
- See hazel.org for more about Hazel, and my social media (see andrewblinn.com) to track Hazel work in progress