

# From Natural Language to Safe Actions

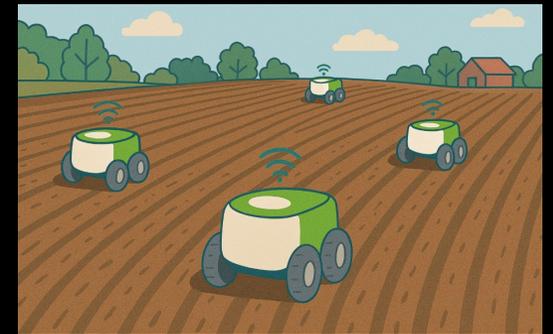
--- Crafting an Automatic **Control Design Architecture** for  
**AI-Physical Systems** towards Society 5.0  
through the **Japan–Canada–USA** Network

## Open Discussions

JST ASPIRE

# Applications of AI-Physical Systems

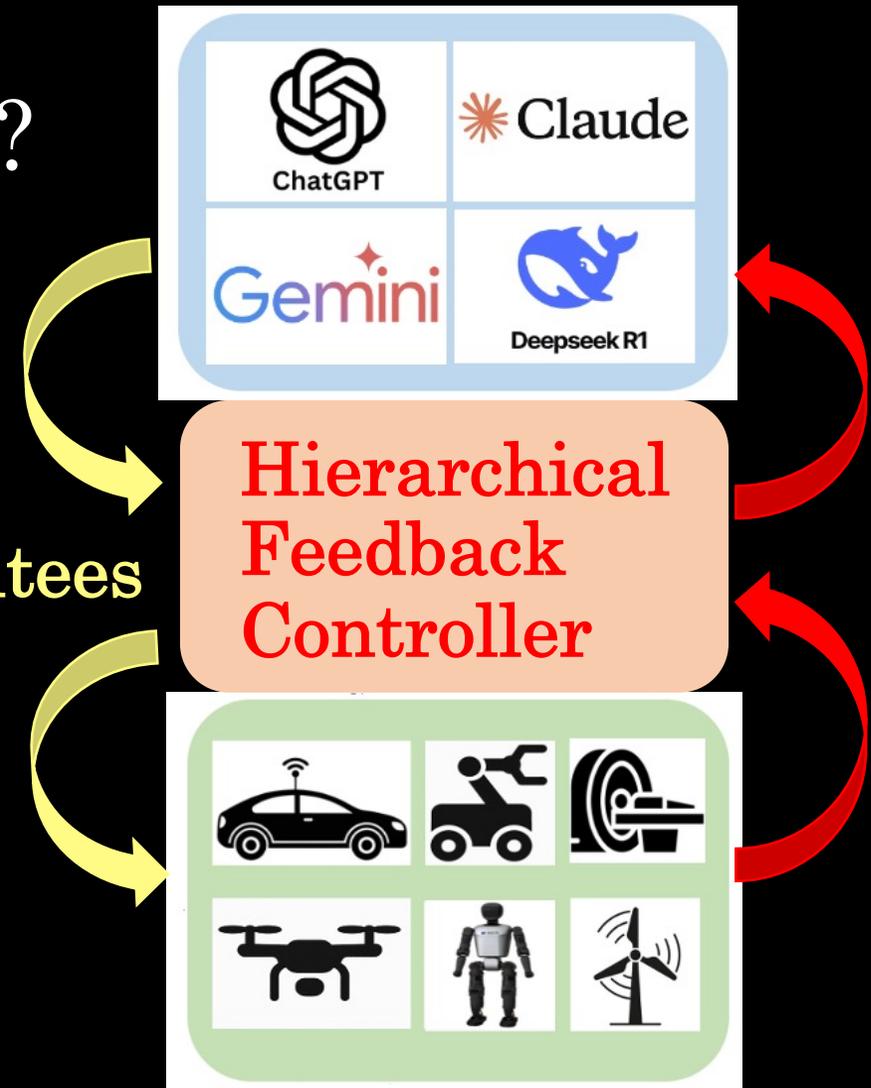
- Impact?
- Technical challenges?
- Use cases?
- Baby examples?



# Where should safety firewalls live

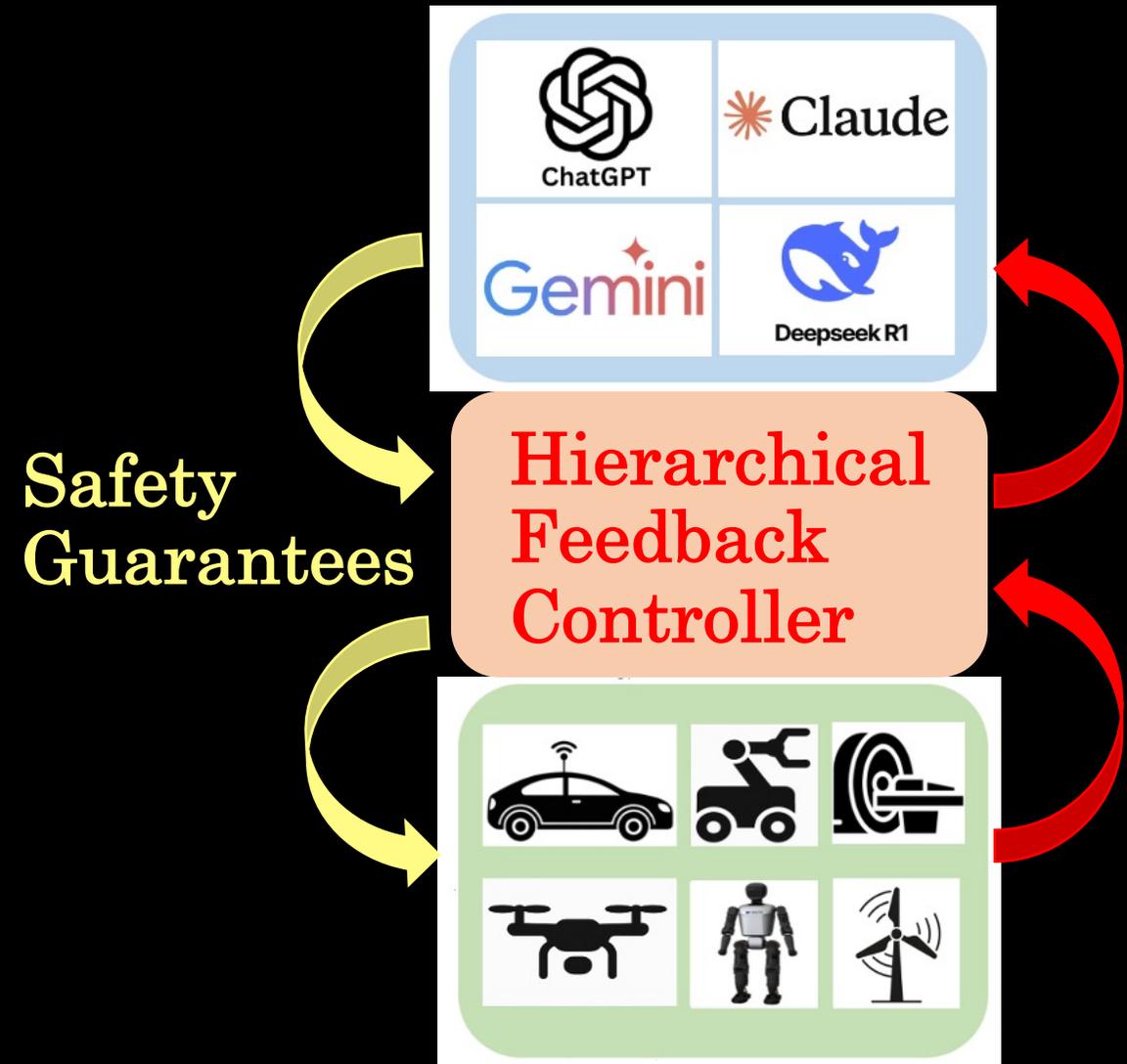
- LLM pretraining / fine-tuning?
- AI-layer reprompting?
- Physical layer control?
- What can be proved, and what cannot?

Safety  
Guarantees



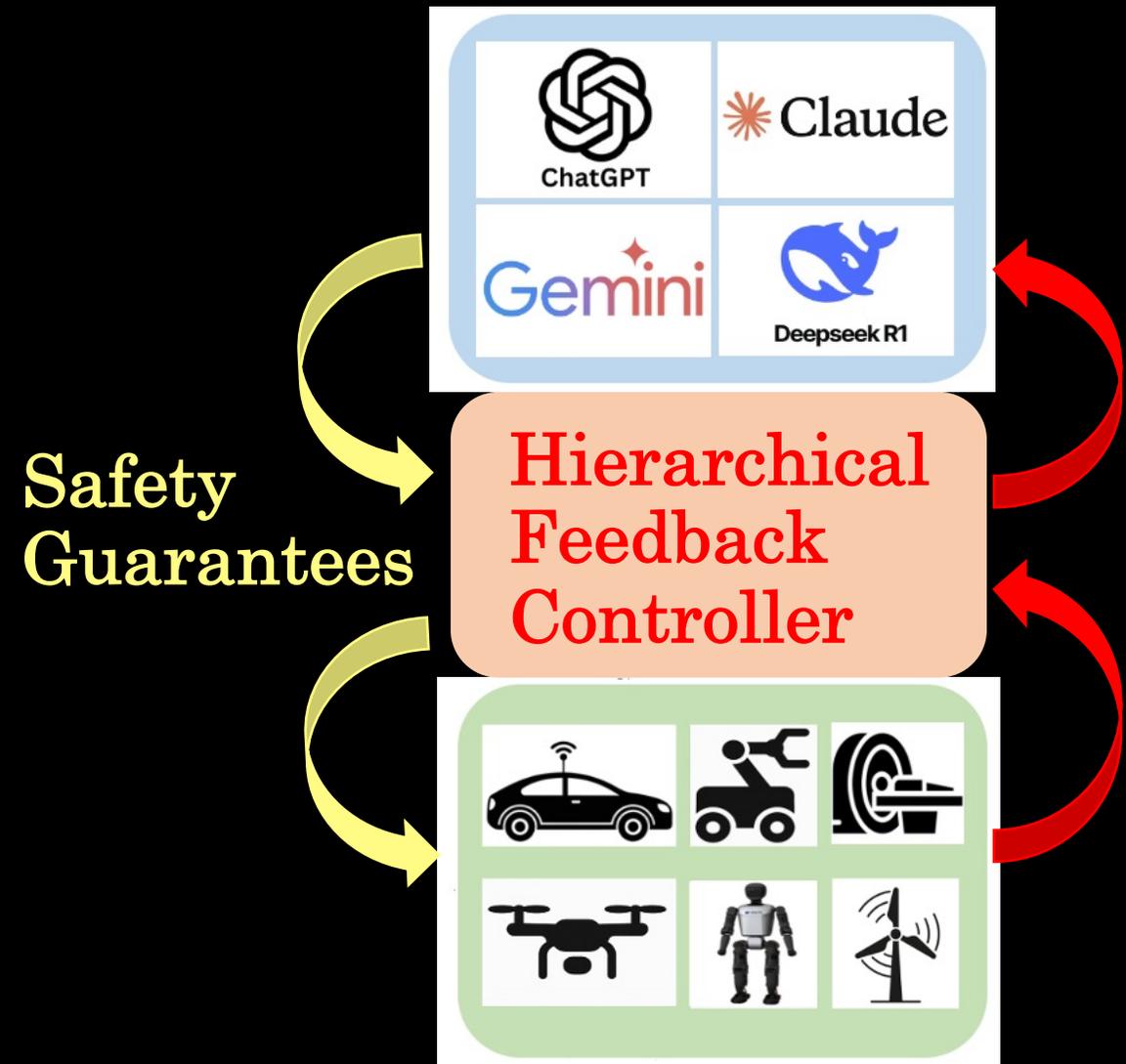
# Online adaptation

- Feedback replanning?
- Dynamic interaction with humans?
- Continual learning via fine-tuning methods?



# Wider issues

- Scalability?
- Explainability?
- Security?
- VLA?



# Collaboration activity brainstorm

- Platforms: Slack/Zoom/Dropbox?
- Meetings in Canada/US?
- Research trip in Japan?
- Summer schools / workshops?

