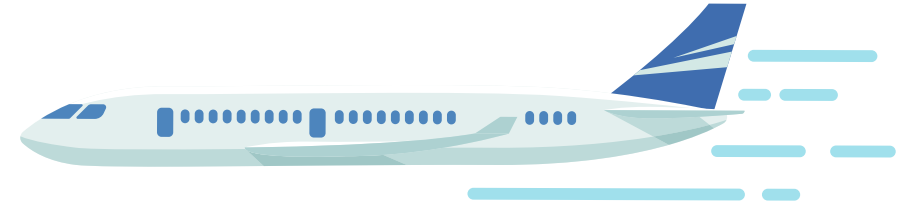


Deployment of Complex Real-Time Control Algorithms on Heterogeneous Embedded Hardware

- A Co-Design Problem -

Yon Vanommeslaeghe

Context



- Cyber-physical systems are becoming more complex.
- So is the software that is meant to monitor and control them.



Problem

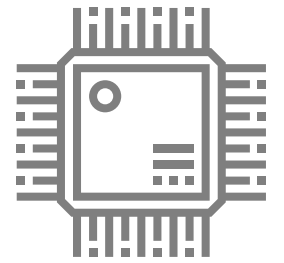


Control

- Complex algorithms
- High numerical precision
- High frequency
- Algorithm parameters



- Complex platforms
 - Multi-core
 - Heterogeneous
- Limited resources

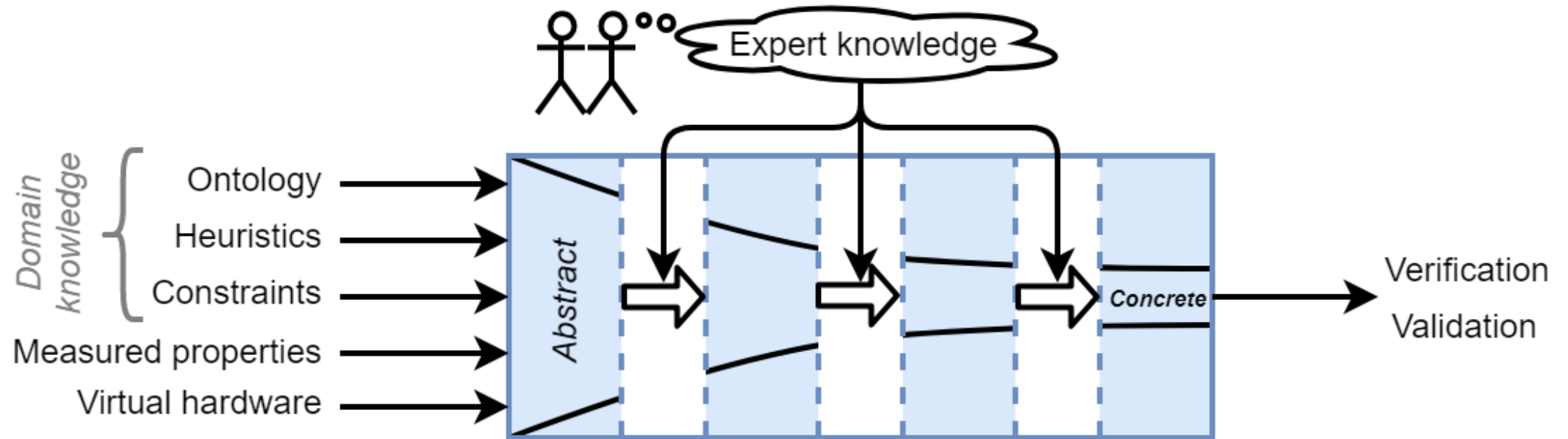


Embedded

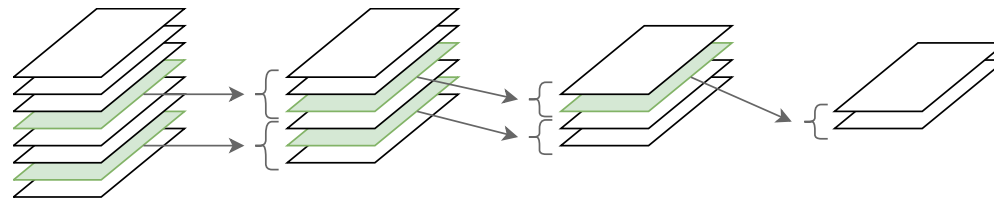


How do we find a good combination?

Approach

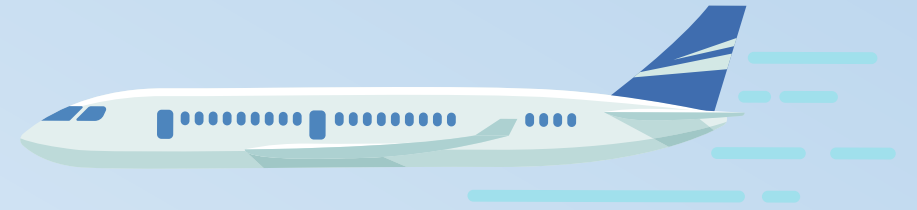


Design space exploration



Companies in Flanders





Questions?

