

Should we change the programming paradigm?

PADTAD 2011 discussion

(July 17th)

Controlling the way we see and access data

- Share everything, ..., read-only (immutable), ..., shared nothing
- Dynamic/immutable data types
- Hide the implementation details under simpler APIs
 - Mixed MP and SHM models

Change the way we think

- Declarative model
- Functional model
- Transactional model

- Mapping the algorithm to the right model

Mapping the paradigm to the hardware

- Deal with many-many-cores
- Specialized processors (e.g., GPUs)
- Hybrid-processors

Should we change the
programming paradigm?
(and how we teach programming)