

# DDDAS 2014 Workshop Discussion Notes

## Projects

- Logistics planning
- Emergency response

## Pattern classification

- Karen Willcox (N. Zealand), Shashi

## Dynamic (e.g., mobile) sensing – more accurate / fewer sensors

- Information theory (Adrian)

## Multi-stream data

- Data models (Shuvra, Sanjay, Xiaoming)

## Programming models

- Data flow, polyhedral compiling, Carlos Varela, Adrian Sandu
- Cloud versus services models (Salim Hariri - DaaS)
- Dynamic workflow
- End to end architecture software frameworks
- Windowing data collection in streams to get the right data only

Big Data = {exascale, mid range} + internet + personal devices + large instruments + ubiquitous sensing

Big Computing = {exascale, mid range} + personal devices + computing on ubiquitous sensors and controllers

## Physics based models

- Multimodel and changing

- Probabilistic models running in parallel with physical model to discover model (in)adequacy

## Errors

- Models
- Data

## Uncertainty Quantification and Propagation

- Using collected data to come up with fast inverse methods

## SIAM Review Paper should also have

- Power grids
- 200+ citations for DDDAS Workshops
  - Only cite papers that have DDDAS in it! 😊
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