Runtime Structure

Static	Adaptive	Asynchronous	Integration
HPF			used in metaproblems modules
	HPF+, pC++		
HPF+ plus Fortran M plus WebWork plus AVS plus ?			
HPC++ (invoking HPF+ modules for performance)		HPC++ supporting higher level systems	
Regular Data Parallel or Embarrassingly Parallel e.g., finite difference i.e., static (compile time identified) analysis	Irregular Adaptive Data Parallel e.g., data mining, multigrid i.e., collective (correlated) irregularity	Asynchronous e.g., Event driven simulations, Expert systems, Transaction processing i.e., no exploitable correlation in adaptive structure	Metaproblems Integrating Static, Adaptive, and Asynchronous modules e.g., Command & Control, Ocean - Atmosphere Integrated climate models, multidsiciplinary analysis & design

- Nearly ALL scientific and engineering simulations
- Gives massive parallelism in many metaproblems

Includes Many NII Applications