

3D-FFT



- 2 different problems:
 - BW benchmark: Multiple 3D-FFT (UPC may be), 12K size, etc.
 - Library (force the memory layout or get the memory layout) →
 Definition of the interface: Kim+Daisuke+Robert)
 - Multi-algorithms (decomposition) in the library (selection based on modeling) → Daisuke
 - Performance modeling: Alex, Daisuke + Kim + Torsten + Hormozd
 - Strategies for overlapping communication and computation →
 Daisuke + Camille + Torsten
 - Implementation of the real to complex → Daisuke.
 - Performance comparison between P3DFFT an FFTE using Bigsim
 + Gengbin Zheng; Ehsan Totoni
- In 6 months: 10% efficiency on 1536^3 on 512 cores
- 10% efficiency on 2K³ on 1K cores
- Implementation of the collaboration → weekly meeting: Alex,
 Kim, Torsten, Camille, Daisuke, Franck + others.