Data Parallel Software for Lattice QCD

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Before we start

Open the envelop you have received and follow instructions to connect to the MIT WiFi network.

It will take about 10 minutes for your connection to activate.

Cast of Characters

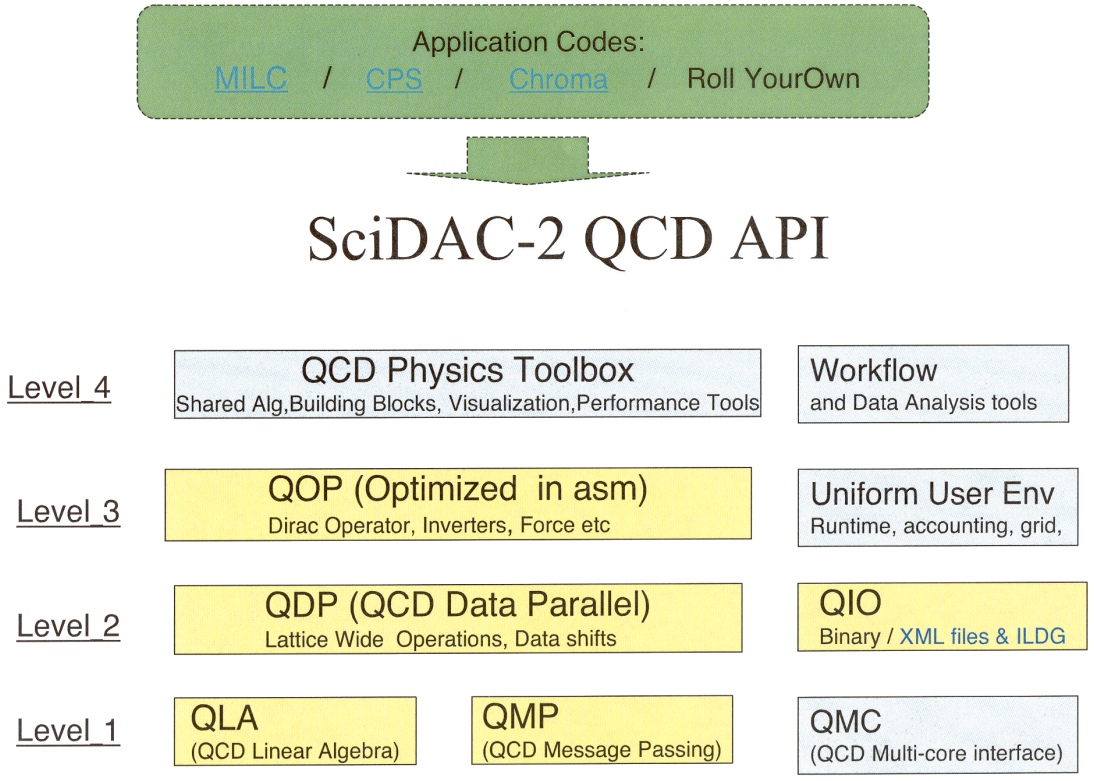
Arizona	Doug Toussaint	MIT	Andrew Pochinsky
	Dru Renner		Joy Khoriaty
BU	Rich Brower *	North Carolina	Rob Fowler
	James Osborn		Ying Zhang *
	Mike Clark	JLab	Chip Watson *
BNL	Chulwoo Jung		Robert Edwards *
	Enno Scholz		Jie Chen
	Efstratios Efstathiadis		Balint Joo
Columbia	Bob Mawhinney *	IIT	Xien-He Sun
DePaul	Massimo DiPierro	Indiana	Steve Gottlieb
FNAL	Don Holmgren *		Subhasish Basak
	Jim Simone	Utah	Carleton DeTar *
	Jim Kowalkowski		Ludmila Levkova
	Amitoj Singh	Vanderbilt	Ted Bapty

Outline

- Overview
- Structure of QDP
- Examples, Part 1
- Lunch Break
- Examples, Part 2

Data Parallel QDP/C API

- Hides architecture and layout
- Operates on lattice fields across sites
- Linear algebra tailored for QCD
- Shifts and permutation maps across sites
- Reductions
- Subsets
- Portable I/O



Where does QDP run?

- All SciDAC QCD computers
- Any machine where MPI runs
- Desktops
- Laptops

Log in into Blue Gene

Please follow the instructions and log in into the machine now.

Location, location, location

Workshop page	http://web.mit.edu/bgl/scidac-2007/
QDP source	http://www.usqcd.org/software.html