

**US ATLAS / CSI Workshop at
BNL, July 25-27 2018**

Report of Contributions

Contribution ID: 1

Type: **not specified**

CSI welcome

Wednesday, 25 July 2018 09:00 (5 minutes)

Presenter: ALEXANDER, Frank (CSI Deputy Director)

Session Classification: Wed: the landscape, the problems, discussions on potential help and collaboration

Contribution ID: 2

Type: **not specified**

US ATLAS welcome

Wednesday, 25 July 2018 09:08 (5 minutes)

Presenter: RAJAGOPALAN, Sridhar (Brookhaven National Laboratory (US))

Session Classification: Wed: the landscape, the problems, discussions on potential help and collaboration

Contribution ID: 3

Type: **not specified**

CSI introduction

Wednesday, 25 July 2018 11:00 (25 minutes)

Presenter: ALEXANDER, Frank (CSI Deputy Director)

Session Classification: Wed: the landscape, the problems, discussions on potential help and collaboration

Contribution ID: 4

Type: **not specified**

ATLAS computing challenges towards HL-LHC

Wednesday, 25 July 2018 09:15 (25 minutes)

Presenter: WENAUS, Torre (Brookhaven National Laboratory (US))

Session Classification: Wed: the landscape, the problems, discussions on potential help and collaboration

Contribution ID: 5

Type: **not specified**

Tracking software

Wednesday, 25 July 2018 11:35 (30 minutes)

Presenters: MOYSE, Edward (University of Massachusetts (US)); CALAFIURA, Paolo (University of California Berkeley (US))

Session Classification: Wed: the landscape, the problems, discussions on potential help and collaboration

Contribution ID: 6

Type: **not specified**

Calorimeter software

Wednesday, 25 July 2018 14:00 (30 minutes)

Presenter: LAMPL, Walter (University of Arizona (US))

Session Classification: Wed: the landscape, the problems, discussions on potential help and collaboration

Contribution ID: 7

Type: **not specified**

Simulation software, fast and full

Wednesday, 25 July 2018 15:00 (30 minutes)

Presenter: GRAY, Heather (LBNL)

Session Classification: Wed: the landscape, the problems, discussions on potential help and collaboration

Contribution ID: 8

Type: **not specified**

I/O and persistency software

Wednesday, 25 July 2018 16:30 (30 minutes)

Presenter: MALON, David (Argonne National Laboratory (US))

Session Classification: Wed: the landscape, the problems, discussions on potential help and collaboration

Contribution ID: 11

Type: **not specified**

Perspectives of a user and analyst

Thursday, 26 July 2018 09:00 (30 minutes)

Presenter: LOCH, Peter (University of Arizona (US))

Session Classification: Thu: zeroing in on specific proposals, activities and collaborations.
Perspectives on the problems

Contribution ID: 12

Type: **not specified**

Proposals

Thursday, 26 July 2018 10:00 (30 minutes)

Presenter: FARBIN, Amir (University of Texas at Arlington (US))

Session Classification: Thu: zeroing in on specific proposals, activities and collaborations.
Perspectives on the problems

Contribution ID: 13

Type: **not specified**

GPU acceleration case study: GPUize

Thursday, 26 July 2018 14:00 (20 minutes)

Presenter: YU, Kwangmin

Session Classification: Thu: zeroing in on specific proposals, activities and collaborations.
Perspectives on the problems

Contribution ID: 14

Type: **not specified**

Discussion on participation in the GPU hackathon at BNL in Sep

Thursday, 26 July 2018 16:20 (20 minutes)

Session Classification: Thu: zeroing in on specific proposals, activities and collaborations.
Perspectives on the problems

Contribution ID: 15

Type: **not specified**

Hackathon session

Thursday, 26 July 2018 16:40 (1h 20m)

Session Classification: Thu: zeroing in on specific proposals, activities and collaborations.
Perspectives on the problems

Contribution ID: 16

Type: **not specified**

ATLAS software build and instrumentation hackathon

Friday, 27 July 2018 09:00 (1h 30m)

Session Classification: Fri: Hackathon and brainstorming

Contribution ID: 17

Type: **not specified**

Software reengineering prospects brainstorm

Friday, 27 July 2018 10:50 (1h 40m)

- what software components and workflows are most amenable to attack for exascale
- potential for the codes on different architectures, look for porting problems to attack
- looking at the codes with rewrite potential in mind, develop strategies for porting, if we can do sufficient homework beforehand.

Session Classification: Fri: Hackathon and brainstorming

Contribution ID: **18**

Type: **not specified**

Next steps, what to pursue and with what priorities

Friday, 27 July 2018 12:30 (30 minutes)

Session Classification: Fri: Hackathon and brainstorming

Contribution ID: 19

Type: **not specified**

Workflow and data management software

Thursday, 26 July 2018 11:20 (40 minutes)

Presenters: KLIMENTOV, Alexei (Brookhaven National Laboratory (US)); DE, Kaushik (University of Texas at Arlington (US))

Session Classification: Thu: zeroing in on specific proposals, activities and collaborations. Perspectives on the problems

Contribution ID: 20

Type: **not specified**

Core software and event data model

Wednesday, 25 July 2018 09:50 (30 minutes)

Presenters: SNYDER, Scott (Brookhaven National Laboratory (US)); TSULAIA, Vakho (University of California Berkeley (US))

Session Classification: Wed: the landscape, the problems, discussions on potential help and collaboration

Contribution ID: 21

Type: **not specified**

Scaling ML algorithms using HPCs

Thursday, 26 July 2018 14:30 (20 minutes)

Presenter: MALIK, Abid

Session Classification: Thu: zeroing in on specific proposals, activities and collaborations.
Perspectives on the problems

Contribution ID: 22

Type: **not specified**

ML applied to various scientific challenges

Thursday, 26 July 2018 15:00 (20 minutes)

Presenter: YOO, Shinjae

Session Classification: Thu: zeroing in on specific proposals, activities and collaborations.
Perspectives on the problems

Contribution ID: 23

Type: **not specified**

Advances in Polyhedral Compilation Techniques

Thursday, 26 July 2018 15:30 (20 minutes)

Presenter: KONG, Martin

Session Classification: Thu: zeroing in on specific proposals, activities and collaborations.
Perspectives on the problems