

**Fifth KAUST-NVIDIA workshop on
Accelerating Scientific Applications using GPUs
Tuesday, February 20th, 2018
Auditorium Between Buildings 4 and 5, KAUST Campus**

Program

08:30 – Breakfast and Registration

09:00 - 09:10 Welcome!

Dr. Saber Feki, *Workshop Chair, KSL & Piero Altoe, NVIDIA*

09:10 - 10:10 Keynote Talk: Enduring Differentiation

Timothy Lanfear, *Director, Solution Architecture and Engineering EMEA, NVIDIA*

10:10 - 10:30 Understanding video at large scale

Fabian Caba Heilbron, *PhD Student at Visual Computing Center, KAUST*

10:30 - 11:00 Coffee Break

11:00 - 11:30 ANSYS Discovery Live. Instantaneous Simulation Results

Karl van Aswegen, *Applications Engineer, Fluid Codes*

**11:30 - 12:00 Texture Based 3-D Volume Segmentation on GPU Clusters:
Application to Digital Rock Physics**

Noomane Keskes, *Total*

Rached Abdelkhalak*, *Research Scientist, Extreme Computing Research Center, KAUST*

Issam Said*, *HPC Solutions Architect for Oil & Gas, NVIDIA*

12:00 - 12:20 Group Photo

12:20 - 13:30 Lunch/Prayer Break

13:30 - 14:30 Keynote Talk: CUDA, Directives, Unified Memory, and Standard Languages

Brent Leback, *Service and Support Manager, PGI/NVIDIA*

14:30 – 15:00 Batch Tile Low-Rank GEMM on Hardware Accelerators

Ali Charara, *PhD Student, Extreme Computing Research Center, KAUST*

15:00 - 15:30 Extreme Computing for Extreme Adaptive Optics: The Key to Finding Life Outside our Solar System

Dalal Sukkari, *PhD Student*, Extreme Computing Research Center, KAUST

15:30 - 16:00 Coffee/Prayer Break

16:00 - 16:20 GPU Resources a KAUST: the present and the future

Saber Feki, *Computational Scientist Lead*, Supercomputing Core Laboratory,
KAUST

16:20 - 16:40 GPU Hackathon

Georgios Markomanolis, *Computational Scientist*, Supercomputing Core
Laboratory, KAUST

16:40 - 17:00 Closing Remarks -- Saber Feki, *Workshop Chair*