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SciDAC: A Tale of Computational **Mathematics, Advanced Computing, and Large-Scale** Scientific Applications

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Abstract: The Scientific Discovery Through Advanced Computing (SciDAC) Program is a unique research and development program in the U.S. Department of Energy (DOE) that promotes close collaborations among computational mathematicians, computer scientists, and domain scientists in scientific investigations on advanced computer architectures. The end goals are discoveries and breakthroughs in scientific domains that are of interest to DOE and require high-performance computing. State-of-the-art high-performance computational algorithms and computer science techniques are recognized as important ingredients that ensure the success of the program. The SciDAC collaborations do not involve just deploying existing computational algorithms and/or improving their performance. New computational algorithms may need to be developed. Close cross-disciplinary collaborations are important. In this talk, we will discuss some of the activities in the SciDAC Program, as well as some of the challenges as we move towards extreme scale computing.

> Date: Wednesday, 9 May 2018 4:00 p.m. – 4:30 p.m. Time: Venue: Rm 222, Lady Shaw Building, The Chinese University of Hong Kong, Shatin

All are Welcome!