



David Keyes is a professor of Applied Mathematics, Computer Science, and Mechanical Engineering at KAUST, where he was a founding Dean in 2009 and founding Director of the Extreme Computing Research Center. He currently focuses on algorithms that exploit data sparsity, targeting power-austere emerging architectures. He collaborates on large-scale applications in energy and environment that demand high performance because of resolution, high fidelity, or requirements of optimization, control, sensitivity analysis, inverse problems, data assimilation, or uncertainty quantification. Before joining KAUST, Keyes led multi-institutional ASCI and SciDAC projects sponsored by the US DoE, ran university collaboration programs at US DoE and NASA institutes, and taught at Columbia, Old Dominion, and Yale Universities. He is an elected Fellow of SIAM, the AMS, and the AAAS. He was awarded the Gordon Bell Prize from the ACM in 1999 and in 2024, the Sidney Fernbach Award from the IEEE Computer Society in 2007, and the SIAM Prize for Distinguished Service to the Profession in 2011. On its 35th anniversary, HPCWire named Keyes one of 35 “legends” of High Performance Computing (<https://www.hpcwire.com/35-hpc-legends-david-keyes/>). He earned a B.S.E. in Aerospace and Mechanical Sciences from Princeton in 1978 and a Ph.D. in Applied Mathematics from Harvard in 1984.