

## **The high dimensional frontier**

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The central theme of this talk is that high-dimensional computation – computation when there are hundreds or thousands of continuous variables – will be an important direction for numerical analysis far into the future. Such problems are arising with increasing frequency, and can be very hard. Much of the focus will be on applications, in mathematical finance, linear models in statistics, and PDE with random coefficients, the latter typified by flow through a random porous medium.