

# A TOUR OF CHEBFUN

Sep. 18, 2107, 2-3pm@Amos Eaton 214

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## Professor Lloyd N. Trefethen



Professor of Numerical Analysis  
and Fellow of Balliol College,  
University of Oxford

Global Distinguished Professor,  
New York University

Fellow of the Royal Society and  
member of the National Academy  
of Engineering

President of SIAM

Invited speaker at ICIAM and ICM  
congresses

Inventor of Chebfun

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Chebfun starts from the idea of continuous analogues of Matlab operations: vectors are overloaded to functions and matrices to operators. The result is a beautiful tool for all kinds of problems of rootfinding, quadrature, optimization, and ODEs. More recently Chebfun has extended much of this functionality to 2D and 3D, including disks and spheres and reaction-diffusion equations. If you are a Matlab user and wish to play along, bring your laptop and download the development branch in advance from <https://github.com/chebfun/chebfun/>.



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