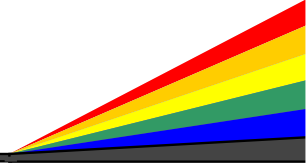


APS COLLOQUIUM SERIES



Speaker: **Gilbert Strang**
 Massachusetts Institute of Technology

Gilbert Strang was an undergraduate at MIT and a Rhodes Scholar at Balliol College, Oxford. He received his Ph.D. from UCLA, and since graduation he has taught at MIT. He was a Sloan Fellow and a Fairchild Scholar, and is a Fellow of the American Academy of Arts and Sciences. He is a Professor of Mathematics at MIT and an Honorary Fellow of Balliol College. Professor Strang has published a monograph with George Fizeau, titled "An Analysis of the Finite Element Method," and six textbooks. He was President of the Society for Industrial Applied Mathematics during 1999 and 2000.

Title: **"Constructing and Applying Wavelets"**

The concept and application of wavelets will be introduced. Wavelets yield a natural multiscale description of functions. The construction of wavelets in continuous time by perfect reconstruction filter banks in discrete time will be described. Applications of wavelets to signal and image processing along with their advantages and shortcomings will be discussed. This lecture will be tutorial in the sense that no prior knowledge of filter banks or wavelets is assumed.

Date: **Wednesday, August 1, 2001**

Time: **11:00 a.m.**

Location: **402 Auditorium**

Refreshments will be served at 10:45 a.m.