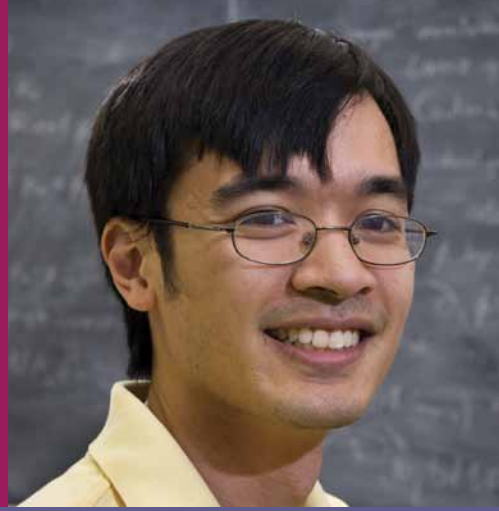


The American Mathematical Society presents

The AMS Einstein Public Lecture in Mathematics

Terence Tao

Professor of Mathematics,
University of California, Los Angeles



The Cosmic Distance Ladder

Saturday, October 9, 2010

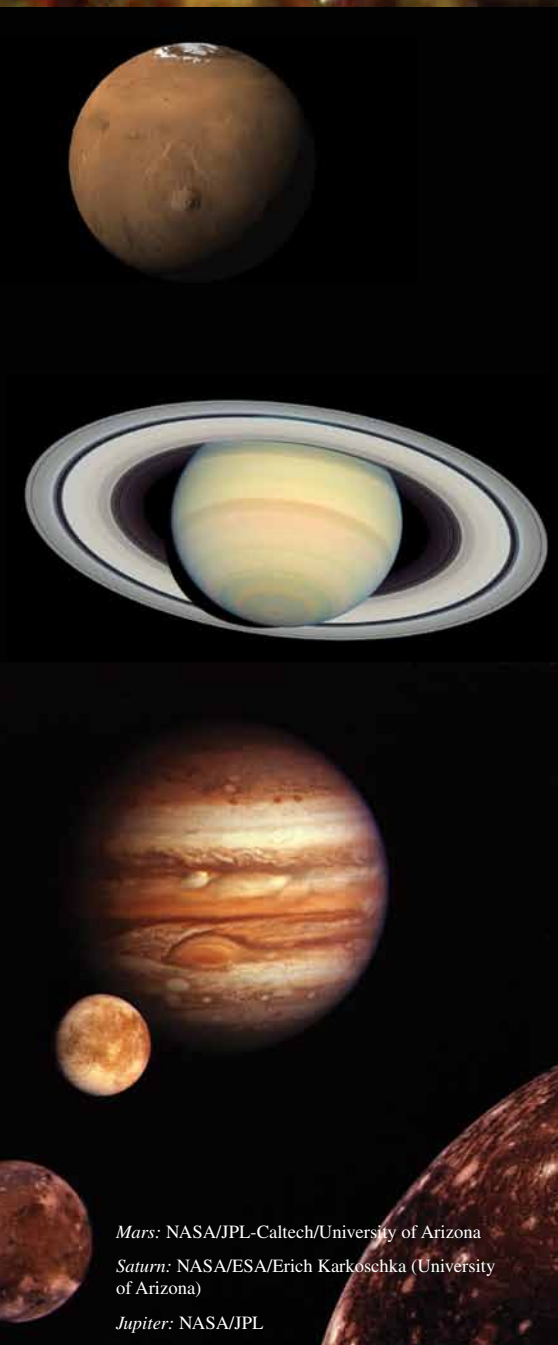
6:15 p.m. with a reception to follow

Schoenberg Hall on the UCLA campus

How do we know the distances from the earth to the sun and moon, from the sun to the other planets, and from the sun to other stars and distant galaxies? Clearly we cannot measure these directly. Nevertheless there are many indirect methods of measurement, combined with basic mathematics, which can give quite convincing and accurate results without the

need for advanced technology (for instance, even the ancient Greeks could compute the distances from the earth to the sun and moon to moderate accuracy). These methods rely on climbing a “cosmic distance ladder,” using measurements of nearby distances to deduce estimates on distances slightly farther away. In this lecture, Tao will discuss several of the rungs in this ladder.

Terence Tao’s mathematical talent was apparent early. He taught himself arithmetic by the age of two, attended college math classes when he was nine, and finished his PhD at 20. When he was 24, he was promoted to full professor at UCLA and remains the youngest person ever appointed to that rank by the university. Among the many awards he’s received are the Fields Medal—the most prestigious prize a mathematician not older than 40 can win—and the MacArthur “genius” grant.



Mars: NASA/JPL-Caltech/University of Arizona
Saturn: NASA/ESA/Erich Karkoschka (University of Arizona)
Jupiter: NASA/JPL

Sponsored by the American Mathematical Society

Hosted by the UCLA Department of Mathematics

This event is part of the AMS 2010 Fall Western Sectional Meeting, October 9-10

www.ams.org/meetings/einstein-lect.html



Sun: ESA/NASA/SOHO

Galaxy-2 (background):
MPIA/NASA/
Caltech/Keck Observatory