



4th Annual UCCS Mathematics Distinguished Lecture

Thursday, September 20th, 2012

12:30 - 1:30 pm (Refreshments at 12:00 pm)

3rd floor Library Apse (West)

Professor Jerry L. Bona

Department of Mathematics, Statistics
and Computer Science

University of Illinois at Chicago

Jerry L. Bona received his PhD in 1971 from Harvard University under supervision of Garrett Birkhoff and then worked at the Fluid Mechanics Research Institute at University of Essex. Subsequently he was faculty member at the University of Chicago, Pennsylvania State University and the University of Texas at Austin, before joining the University of Illinois at Chicago.

He is well-known for his contributions to the fields of fluid mechanics, partial differential equations and computational math and has been active in other branches of pure and applied mathematics, ocean engineering and economics.

**Students are strongly encouraged
to participate!**

Mathematics and the Ocean

Describing various aspects of the Earth's oceans using mathematics goes back to the 17th century. Some of the world's greatest mathematicians and physicists have been involved in this enterprise.

The lecture will begin with a cursory sketch of some of the more important milestones in the mathematics of the ocean. We will then move on to indicate briefly an example taken from water wave theory of how mathematical models are created.

We then turn to some of the more spectacular applications of the theory. This will involve us in tsunami propagation, rogue waves and near-shore zone sand bars and beach protection, as time permits.