

# CARNEGIE MELLON UNIVERSITY & THE UNIVERSITY OF PITTSBURGH

## APPLIED DECISION MODELING SEMINAR SERIES

Presents

- Speaker:** *Thomas L. Saaty, Katz Graduate School of Business, University of Pittsburgh*
- Topic:** *Decision Making in Complex Environments: The Analytic Hierarchy and Analytic Network Processes*
- Date & Time:** *Thursday, September 25, 3:30 – 5 PM*
- Place:** *1175 Benedum Hall (Kresge Room, 11<sup>th</sup> floor), University of Pittsburgh*

**There will be a reception following the talk from 5:00 – 5:45 PM in the Kresge Room.**

### **Abstract:**

Decision making depends on our values and goals to establish order in the form of priorities. A major problem in making decisions is how to deal with the myriad intangible criteria (social, environmental and political influences) that all decisions inevitably must face, to measure them in a meaningful way and combine the outcome with the measurements of tangibles. Judgments expressed in the form of comparisons are fundamental in our cognitive makeup. The Analytic Hierarchy Process (AHP) and its generalization to dependence and feedback, the Analytic Network Process (ANP) are theories about how to measure alternatives or courses of action under both tangible and intangible criteria, then combine these measures to make a decision. Real life decisions involving benefits, costs, opportunities and risks and how to combine them and allocate resources subject to constraints will be illustrated. The Super Decisions software that implements the ANP will be made available to attendees of the seminar.

### **Biography:**

**Thomas Saaty**, PH.D Mathematics, Yale, holds the Chair of University Professor at the Katz Graduate School of Business of the University of Pittsburgh. Before that he was a professor at the Wharton School of the University of Pennsylvania for ten years. Before that, he spent seven years at the State Department in Washington, D.C. Decision making, planning, and the analysis of neural functions are his current research interests. Prof. Saaty developed the Analytic Hierarchy Decision Process (AHP) and its generalization to dependence and feedback, the Analytic Network Process (ANP), in his search for an effective means to deal with weapons tradeoffs and more generally with complex decision-making and resource allocation. He has written 13 books on the theory and applications of the Analytic Hierarchy Process and the Analytic Network Process. He has consulted for many corporations and governments to help them make sensitive and important decisions.

Additional information about the Carnegie Mellon University/University of Pittsburgh Applied Decision Modeling Seminar Series can be found at

<http://www.andrew.cmu.edu/user/johnson2/AppliedOR.htm>.

Prof. Saaty is available for meetings Thursday, September 25 between 9 AM and 3:15 PM. Please make appointments using the Pittsburgh Social Sciences Seminar Tracker,

<http://gsiaserver1.gsia.cmu.edu/seminars/seminar.html>.