USC Viterbi
School of Engineering
Daniel J. Epstein Department of Industrial and Systems Engineering

2023 Eberhardt Rechtin Keynote Lecture

Mark S. Daskin

Thursday, November 16th
at 4:00PM
Reception to follow after lecture

USC Hotel, Center Ballroom
3540 S. Figueroa St. L.A., CA 90007

Core Principles of Operations Management

In this talk, I claim that three core principles underly operations management: optimization, managing uncertainty, and dealing with tradeoffs. Three broad categories of tradeoffs are outlined. The core principles are exemplified in an extension of the classical newsvendor problem in which we tradeoff the expected profit and the maximum regret. The problem is formulated as a chance-constrained optimization problem. The talk will present a graphical approach to an algorithm for finding the tradeoff. The model has applications in a broad array of contexts including the analysis of some of the proposed changes to college admission policies.

Please RSVP to attend

Mark S. Daskin

Mark S. Daskin is the immediate past Department Chair of the Industrial and Operations Engineering Department at the University of Michigan. He officially retired in May 2022 and holds the Clyde W. Johnson Collegiate Professorship, Emeritus. Prior to joining the faculty at Michigan in 2010, Daskin was on the faculty at Northwestern University (for 30 years) and the University of Texas (for a year and a half).

He received his Ph.D. from the Civil Engineering Department at M.I.T. in 1978. He also holds a B.S.C.E. degree from that department and a Certificate of Post-Graduate Study in Engineering from the University of Cambridge in England.

His research focuses on the application and development of operations research techniques for the analysis of health care problems, as well as transportation, supply chain, and manufacturing problems. He is the author of over 80 refereed papers and of three books: *Network and Discrete Location: Models, Algorithms and Applications* (John Wiley, 1995; second edition, 2013); *Service Science* (John Wiley, 2010), winner of the IIE Joint Publishers Book of the Year Award in 2011; and *Bite-Sized Operations Management*, Springer Nature 2021.

Daskin received the Frank and Lillian Gilbreth Award from the Institute of Industrial and Systems Engineers in 2021. He was elected to the U.S. National Academy of Engineering in 2017. He is a Fellow of both INFORMS and IIE and has received the David F. Baker Distinguished Research Award, the Technical Innovation Award and the Fred C. Crane Award for Distinguished Service from IIE as well as the Kimball Medal for service to the society and the profession from INFORMS. He received the Lifetime Achievement Award in Location Analysis from the Section on Location Analysis of INFORMS in 2014. He is a past editor-in-chief of both *IIE Transaction* and *Transportation Science*. In 2006, he was the president of INFORMS. He served as the chair of the Department of Industrial Engineering and Management Sciences at Northwestern University from 1995-2001.