



A U.S. Department
of Energy National
Laboratory

News Release

Contact: Eleanor Taylor
(630) 252-5510
etaylor@anl.gov
For immediate release

Two Argonne mathematicians recognized as SIAM Fellows

ARGONNE, Ill. (May 01, 2009) — Hans G. Kaper and Jorge Moré, both researchers from the U.S. Department of Energy's Argonne National Laboratory, have been named Fellows of the Society for Industrial and Applied Mathematics (SIAM).

The fellowship program, SIAM's first ever, awards those who have been members of SIAM for at least 15 years and who have made outstanding contributions in research, education or industrial activities. Fellows Kaper and Moré are both members of Argonne's Mathematics and Computer Science Division, which conducts leading-edge research in computational and applied mathematics.

"Jorge and Hans are both exceptional researchers whose contributions have improved the effectiveness of scientists across the world in solving challenging problems," said Ewing Lusk, director of the Mathematics and Computer Science Division at Argonne. "Their research has dramatically extended our understanding of fundamental processes and our ability to predict behavior across a broad range of complex natural and engineered systems."

Moré has been recognized for his work in the analysis and development of algorithms and software for optimization problems — in particular, optimization environments and optimization software for high-performance computers. He is also an Argonne Distinguished Fellow, the highest scientific ranking offered at the laboratory to recognize exceptional contributions in a person's field.

-more-



Argonne National Laboratory is a U.S.
Department of Energy national laboratory
managed by UChicago Argonne, LLC.

SIAM Fellows – add one

More's current projects include the Network-Enabled Optimization System (NEOS) and the Toolkit for Advanced Optimization (TAO). NEOS provides access to state-of-the-art numerical optimization software, allowing anyone to solve optimization problems over the Internet. TAO is an open source toolkit for solving large-scale nonlinear optimization problems on high-performance distributed architectures. Both TAO and NEOS are heavily used by academic, commercial and government institutions across the world on a variety of applications from modeling electricity markets to surgical control.

Hans Kaper is an Argonne senior mathematician emeritus, who has been recognized for his work on analytical and numerical methods for differential equations. He is a world-renowned expert in the mathematics of physical systems and the development and analysis of equations that describe these systems and their functions. His current research is concerned with applications of dynamical systems theory, bifurcation phenomena, pattern formation and the mathematics of climate change.

Kaper served twice as a program director for the National Science Foundation. He is a corresponding member of the Royal Netherlands Academy of Arts and Sciences and an adjunct professor in the School of Music at the University of Illinois at Urbana-Champaign and the Department of Mathematics and Statistics at Georgetown University in Washington, D.C., where he resides. Coincidentally, his son Tasso, who is a professor in the Mathematics Department at Boston University, has also been recognized as a SIAM Fellow.

Argonne's Mathematics and Computer Science Division is operated with support from the Office of Advanced Scientific Computing Research in the U.S. Department of Energy's Office of Science. The division focuses on applied mathematics, performance and optimization analysis, very large scale computing, scientific visualization and wide-area distributed computing.

The Fellows will be recognized on the SIAM Fellows website, in SIAM News and at the 2009 SIAM Annual Meeting Prizes and Awards Luncheon. SIAM is an international community of close to 12,000 individual members that fosters the development of applied mathematical and computational methodologies essential in solving many real-world problems.

-more-

SIAM Fellows – add two

The U.S. Department of Energy's Argonne National Laboratory seeks solutions to pressing national problems in science and technology. The nation's first national laboratory, Argonne conducts leading-edge basic and applied scientific research in virtually every scientific discipline. Argonne researchers work closely with researchers from hundreds of companies, universities, and federal, state and municipal agencies to help them solve their specific problems, advance America's scientific leadership and prepare the nation for a better future. With employees from more than 60 nations, Argonne is managed by [UChicago Argonne, LLC](#) for the [U.S. Department of Energy's Office of Science](#).