



Antony Jameson

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For exceptional contributions to algorithmic innovation and the development of computational fluid dynamic codes that have made important contributions to aircraft design.

The author of 444 scientific papers, Antony Jameson has made major contributions to many fields of aerospace science and technology, especially to the areas of computational fluid dynamics (CFD), control theory, and aerodynamics. In the words of the *International Journal of CFD* (November 2005): “Antony Jameson has had a huge impact on the field of Computational Fluid Dynamics for over four decades, opening up new avenues of research and developing tools to solve problems once thought beyond reach. From the formulation of a problem, to the development of the numerical technology to solve it, to the implementation of that technology in efficient tools and the fluid dynamical interpretation of results, Jameson has impacted most aspects of CFD.” Jameson is also credited with major breakthroughs in the area of aerodynamic shape optimization, showing how CFD and control theory can be combined to allow designers to calculate optimum wing shapes which minimize drag and maximize performance.

Jameson incorporated his numerical algorithms in two series of CFD codes: “FLO” (for flow analysis) and “SYN,” (for aerodynamic design) and both have played critical roles in developing some of the world’s most well-known jetliners, including Airbus’ 320 and 330, as well as Boeing’s 737-500, 737-700, 747-400, and the 777. His work has advanced the state of CFD, with some noting that “many of the advances were propelled by the understanding, the algorithm technology, and the codes that were created by Jameson.” Aircraft manufacturers have universally used his codes for their CFD needs. NASA also used the codes in their Supersonic Transport Program, and a derivative of the codes was used by the Alinghi America’s Cup team to predict the performance of their winning yacht. Using SYN107, Jameson collaborated with Dr. Robert Mills in the systematic application of shape optimization to design the wing of the Gulfstream G650, which has set new standards of speed and range for business jets. This work was recently recognized with an award from the British Royal Aeronautical Society.

Antony Jameson is a lifetime member and Fellow of AIAA, a Fellow of the British Royal Society, the Royal Aeronautical Society, and the Royal Academy of Engineering. He is also a Foreign Associate of the National Academy of Engineering. Currently a full-time Research Professor in the Department of Aeronautics & Astronautics at Stanford University, he was formerly James S. McDonnell Distinguished University Professor of Aerospace Engineering at Princeton University from 1982 to 1997 and Thomas V. Jones Professor of Engineering at Stanford from 1997 through 2014.

Jameson's numerous past honors include the 1988 British Royal Aeronautical Society's Gold Medal, the 1993 AIAA Fluid Dynamics Award, the 1995 ASME Spirit of St. Louis Medal, the 2006 Elmer A. Sperry Award, the 2015 USACM Von Neumann medal and the 2015 AIAA Pendray Aerospace Literature Award.