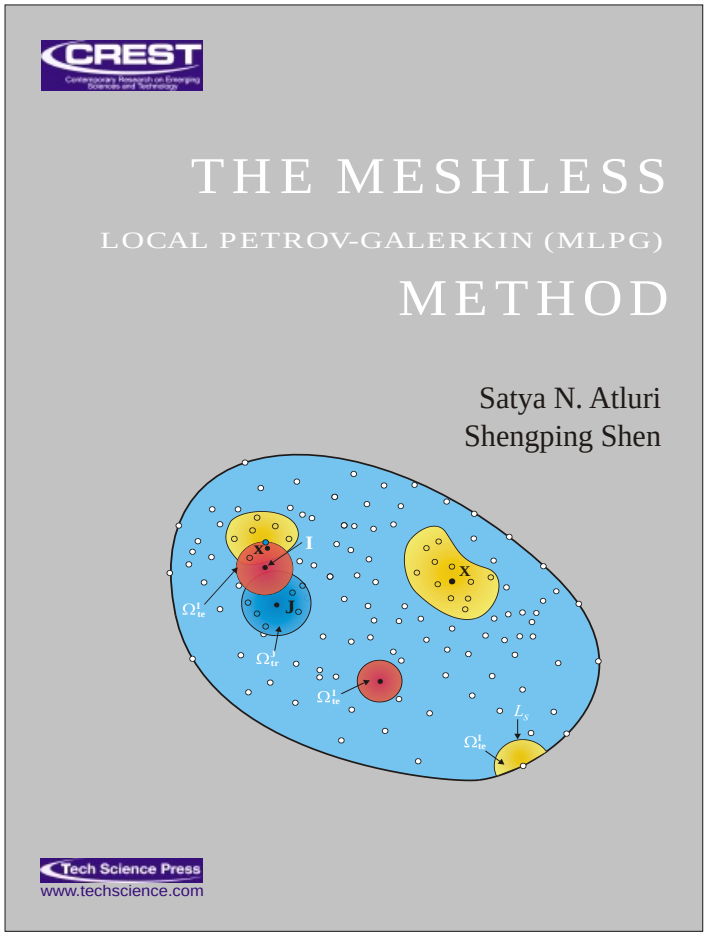

Computer methods such as the Finite Element & Boundary Element Methods have made possible spectacular advances in the computer modeling of processes and phenomena in every branch of engineering & the sciences, in the years 1960-2000. The last decade has witnessed a substantial world-wide effort to devise *a new class of computer methods*, aimed at eliminating the human-labor cost of introducing geometric meshes in complex-shaped domains.

The Meshless Local Petrov-Galerkin (MLPG) Method by S. N. Atluri & S. Shen is the first monograph (in the new series, CREST), on this *new class of meshless methods*, that are expected to revolutionalize engineering/science analyses. It not only deals with several meshless methods in general, but also with the *Meshhless Local Petrov-Galerkin (MLPG) method, pioneered by the authors*, in particular. The MLPG method not only eliminates the intensive human-labor costs involved in an analysis, but is also often computationally less-expensive, as compared to the Finite Element & Boundary Element Methods.

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About the authors

Satya N. Atluri, is a distinguished and world-renowned scholar based at University of California, Irvine, and has been affiliated with a number of uni-versities, including Georgia Tech (Institute Professor, Regents' Professor of Engineering, and Hightower Chair Professor); MIT (Jerome Clark Hunsaker Visiting Professor of Aeronautics); Tsinghua University, Beijing (Guest Professor); KAIST (Adjunct Professor); I.I.Sc (Satish Dhawan Chair Visiting Professor); and others. Dr. Atluri is a Member of the U.S. National Academy of Engineering, a Foreign Fellow of the Indian National Academy of Engineering, an Honorary Fellow of the International Congress on Fracture, and a Fellow of many societies, including the American Academy of Mechanics, Aero. Soc. of India, AIAA and ASME. He is the recipient of numerous awards, including the Excellence in Aviation Award, FAA; President's National Medal of Technology Distinguished Service Award, US Secretary of Commerce; Pendray Aerospace Literature Award(AIAA); Highly Cited Researcher (ISI); Eringen Medal in Engineering Science; AIAA SDM Medal; AIAA SDM Lecture Award; ASCE Aerospace Medal; Computational Mechanics Medals from Greece and Japan; The ICES Gold Medal; Doctor of Science (Honoris Causa) from Ireland; Sigma-Xi Sustained Research Award; Distinguished Professor Award of 1986 from Georgia Tech; Midwestern Mechanics Lecturer, Southwest Mechanics Lecturer, and many many others. He is the Founder & Editor-in-chief of CMES: Computer Modeling in Engineering & Sciences.

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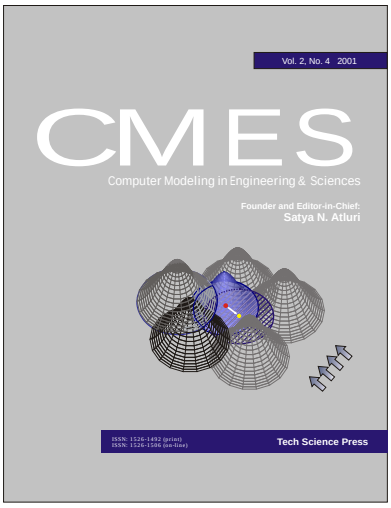

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