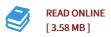




Numerical Simulation of Shock/Turbulent Boundary Layer Interaction (Paperback)

By National Aeronautics and Space Adm Nasa

Independently Published, United States, 2018. Paperback. Condition: New. Language: English. Brand new Book. Most flows of aerodynamic interest are compressible and turbulent. However, our present knowledge on the structures and mechanisms of turbulence is mostly based on incompressible flows. In the present work, compressibility effects in turbulent, high-speed, boundary layer flows are systematically investigated using the Direct Numerical Simulation (DNS) approach. Three-dimensional, time-dependent, fully nonlinear, compressible Navier-Stokes equations were numerically integrated by high-order finite-difference methods; no modeling for turbulence is used during the solution because the available resolution is sufficient to capture the relevant scales. The boundary layer problem deals with fully-turbulent compressible flows over flat geometries. Apart from its practical relevance to technological flows, turbulent compressible boundary layer flow is the simplest experimentally realizable turbulent compressible flow. Still, measuring difficulties prohibit a detailed experimental description of the flow, especially in the near-wall region. DNS studies provide a viable means to probe the physics of compressible turbulence in this region. The focus of this work is to explore the paths of energy transfer through which compressible turbulence is sustained. The structural similarities and differences between the incompressible and compressible turbulence are also investigated. The energy flow patterns or energy cascades...



Reviews

The publication is not difficult in go through better to comprehend. I could comprehended everything using this created e publication. Its been designed in an exceptionally easy way in fact it is merely soon after i finished reading through this ebook by which basically transformed me, modify the way i really believe.

-- Taylor Gleason

This publication is definitely not effortless to get going on reading but very fun to learn. It really is writter in simple terms rather than difficult to understand. Its been printed in an extremely simple way and it is merely right after i finished reading through this pdf by which basically changed me, alter the way in my opinion.

-- Scotty Paucek

Related Kindle Books



Elements Of Optoelectronics & Fiber Optics (Pb:

Chen

PAPERBACK. Condition: New. Book Cover and ISBN may be different from US edition but contents as same US Edition. Excellent Quality, Service and customer satisfaction guaranteed! We may ship the books from Asian regions for inventory purpose. Our courier service is not



Nessus Network Auditing: Beale Jay

Et.Al

PAPERBACK. Condition: New. Book Cover and ISBN may be different from US edition but contents as same US Edition. Excellent Quality, Service and customer satisfaction guaranteed! We may ship the books from Asian regions for inventory purpose. Our courier service is not...



THE WADSWORTH GUIDE TO RESEARCH 2ED (IE): MILLER-COCHRAN S

K

PAPERBACK. Condition: New. Book Cover and ISBN may be different from US edition but contents as same US Edition. Excellent Quality, Service and customer satisfaction guaranteed! We may ship the books from Asian regions for inventory purpose. Our courier service is not...



MCQS FOR FIRST FRCR OXSTRT:NCS P: VARDHANABHUTI, JAMES,

GRAY

PAPERBACK. Condition: New. Book Cover and ISBN may be different from US edition but contents as same US Edition. Excellent Quality, Service and customer satisfaction guaranteed! We may ship the books from Asian regions for inventory purpose. Our courier service is not...



PresentationExpress for Realidades

2

Prentice Hall. CD-ROM. Condition: New. 0131661477 Quick and easy instructional tool that helps teachers present, practice, and assess the vocab and grammar taught in Realidades. Brand new.



Writing with Hemingway: A Writer's Exercise Book

Createspace Independent Publishing Platform, United States, 2016. Paperback. Condition: New. Language: English. Brand new Book. A work of creativity such as an artist's song, a dance, a musical instrument, a paint brush, produce a vision or a sound powerful enough to evoke...