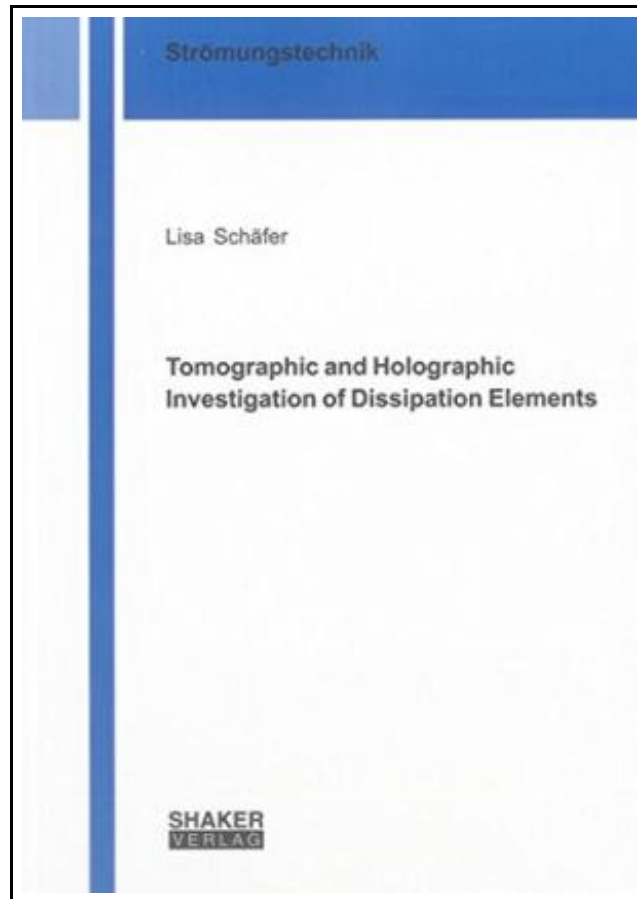


Tomographic and Holographic Investigation of Dissipation Elements



Filesize: 3.4 MB

Reviews

Unquestionably, this is actually the very best job by any article writer. I have read and that i am certain that i am going to planning to go through once again once more in the foreseeable future. I realized this publication from my i and dad advised this pdf to find out.
(Rusty Hamill Sr.)

TOMOGRAPHIC AND HOLOGRAPHIC INVESTIGATION OF DISSIPATION ELEMENTS



Shaker Verlag Aug 2012, 2012. Buch. Book Condition: Neu. Neuware - This doctoral thesis evolved in the frame of the joint proposal 'Geometrical Structure of Small-Scale Turbulence'. The central subject of this proposal is the analysis of turbulent fields by so-called 'dissipation elements' as introduced by Wang & Peters (JFM, 2006). This novel method determines the local minimum and maximum points of a fluctuating scalar field via gradient trajectories starting from every grid point in the direction of the steepest ascending and descending scalar gradients. Relying on gradient trajectories, a dissipation element is defined as the region of all the grid points the trajectories of which share the same pair of maximum and minimum points. Since these elements are space-filling, characteristics of the entire turbulent field can be derived from dissipation element related statistics. The procedure has also been successfully applied to various DNS fields, i.a., using the fluctuations of the three velocity components and the kinetic energy as scalar fields (Wang & Peters, JFM, 2008). According to the joint proposal, this thesis discusses the experimental validation of the statistical properties of dissipation elements derived from DNS, comprising the identification and development of an adequate three-dimensional, three-component measurement technique. Subject of the experimental investigation is a fully developed turbulent channel flow. To provide this reference flow a special Eiffel-type wind tunnel is constructed and reference measurements by two-dimensional, two-component (2D2C) particle-image velocimetry (PIV) and laser-Doppler velocimetry (LDV) are performed to proof the quality of the flow. The three-dimensional velocity distribution within the core region of the channel flow is measured by means of tomographic and holographic particle-image velocimetry (PIV). Based on these measurements the two volumetric measurement techniques are juxtaposed with respect to their capability to detect dissipation elements, i.e. small-scale, instantaneous, turbulent structures. In case of the tomographic PIV...



[Read Tomographic and Holographic Investigation of Dissipation Elements Online](#)



[Download PDF Tomographic and Holographic Investigation of Dissipation Elements](#)

See Also



Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers...

[Read ePub »](#)



The Java Tutorial (3rd Edition)

Pearson Education, 2001. Softcover. Book Condition: Neu. Gebraucht - Sehr gut Unbenutzt. Schnelle Lieferung, Kartonverpackung. Abzugsfähige Rechnung. Bei Mehrfachbestellung werden die Versandkosten anteilig erstattet. - Praise for "The Java' Tutorial, Second Edition" includes: "This book...

[Read ePub »](#)



Adobe Indesign CS/Cs2 Breakthroughs

Peachpit Press, 2005. Softcover. Book Condition: Neu. Gebraucht - Sehr gut Unbenutzt. Schnelle Lieferung, Kartonverpackung. Abzugsfähige Rechnung. Bei Mehrfachbestellung werden die Versandkosten anteilig erstattet. - Adobe InDesign is taking the publishing world by storm and...

[Read ePub »](#)



Have You Locked the Castle Gate?

Addison-Wesley Professional. Softcover. Book Condition: Neu. Gebraucht - Sehr gut Unbenutzt. Schnelle Lieferung, Kartonverpackung. Abzugsfähige Rechnung. Bei Mehrfachbestellung werden die Versandkosten anteilig erstattet. - Is your computer safe Could an intruder sneak in and steal...

[Read ePub »](#)



Hands Free Mama: A Guide to Putting Down the Phone, Burning the To-Do List, and Letting Go of Perfection to Grasp What Really Matters! (Paperback)

ZONDERVAN, United States, 2014. Paperback. Book Condition: New. 211 x 137 mm. Language: English . Brand New Book. Rachel Macy Stafford s post The Day I Stopped Saying Hurry Up was a true phenomenon on...

[Read ePub »](#)

**Puzzle for the Secret Seven**

Hachette Children's Group. Paperback. Book Condition: new. BRAND NEW, Puzzle for the Secret Seven, Enid Blyton, The Secret Seven are Peter and his sister Janet, Jack, Colin, George, Pam and Barbara. They meet every holiday

[Download Document »](#)

**A Lover's Almanac: A Novel**

Penguin Books. PAPERBACK. Book Condition: New. 0140275126 12+ Year Old paperback book-Never Read-may have light shelf or handling wear-has a price sticker or price written inside front or back cover-publishers mark-Good Copy- I ship FAST

[Download Document »](#)

**Oxford Reading Tree Read with Biff, Chip and Kipper: Phonics: Level 2: A Yak at the Picnic (Hardback)**

Oxford University Press, United Kingdom, 2014. Hardback. Book Condition: New. Mr. Nick Schon (illustrator). 177 x 148 mm. Language: English . Brand New Book. Read With Biff, Chip and Kipper is the UK s best-selling

[Download Document »](#)

**Genuine] action harvest - Kunshan Yufeng Experimental School educational experiment documentary(Chinese Edition)**

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date :2005-09-01 Pages: 377 Publisher: Fujian Education Press title: action with harvest

[Download Document »](#)

**Third grade - students fun reading and writing training**

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Pages Number: 171 Publisher: Shanghai Far East Publishing House Pub. Date :2010-8-1. First. the

[Download Document »](#)