ETC14 Program

Saturday, 31 August 2013

17:00-19:30 **REGISTRATION**

Registration (Lobby ENS-Lyon)

Sunday, 1 September 2013

7:30-8:45 **REGISTRATION**

Registration (Lobby ENS-Lyon)

8:45-9:00 **OPENING**

Opening (Room 1)
J.-F. Pinton

9:00-9:55 **PLENARY SESSION 1**

Plenary Session 1 - Rich Kerswell (Room 1)
Recurrent Flows Embedded In 2d Turbulence

10:00-11:00 **SA.1-5**

Room 1	Room 2	Room 3	Room 4	Room 5
SA.1 - LT1 (Lagrangian) O. Kamps	**SA.2 - AT1 (Acoustics)** N. Mordant	**SA.3 - CRYO1 (Cryogenic)** C. Barenghi	**SA.4 - NNF1 (Non-Newtonian)** D. Vincenzi	**SA.5 - WT1 (Wave Turbulence)** M. Bustamante
Lagrangian Single Particle Turbulent Statistics Through The Hilbert-huang Transform Yongxiang Huang; Luca Biferale; Enrico Calzavarini; Chao Sun; Federico Toschi	***Noise Radiation From Instability Waves In Subsonic Coaxial Jets*** Michael Gloor; Dominik Obrist; Leonhard Kleiser	***Lagrangian Dynamics Of Solid Particles In Quantum Turbulence*** Marco La Mantia; Daniel Duda; Miloš Rotter; Ladislav Skrbek	***Dns Study Of The Elastic Turbulence In A 3d Parallel Plate Channel*** Hongna Zhang; Tomoaki Kunugi;Fengchen Li	***Secondary Instability Development In Breaking Lee Waves At Different Reynolds And Prandtl/Schmidt Numbers*** Sergey N. Yakovenko; T. Glyn Thomas; Ian P. Castro
On The Comparison Of The Dynamics Of Particles Within Homogeneous Isotropic Turbulence And The Reynolds And Favre Filtered Flow Velocities. Paul Stegeman; Julio Soria; Andrew Ooi	***Acoustic - Induced Turbulence In Bubbles*** Frank Secretain; Andrew Pollard; Brian Milne	***First Results Of The Shrek Experiment At Ultra-high Reynolds Number*** Berengere Dubrulle; SHREK Collaboration	***Experimental Measurements Of Dilute Polymer Solutions In A Von Karman Swirling Flow*** Alexandre de Chaumont Quitry; Nicholas Ouellette	***Numerical Investigation On Transition Of 2-d Faraday Waves*** Kentaro TAKAGI; Takeshi MATSUMOTO
Particle Transport In Weakly Turbulent Rayleigh-benard Convection Simon Schütz; Eberhard Bodenschatz	***Interaction Of Acoustic Waves And Roughness Elements In A Three-dimensional Boundary Layer*** Nima Shahriari; Ardeshir Hanifi; Dan Henningson	***Hot-wire Measurements In A Liquid He Turbulent Inertial Jet: Intermittency In He II*** Davide Durì; Pantxo Diribarne; Jean-Paul Moro; Philippe Charvin; Yves Gagne; Christophe Baudet	***Direct Numerical Simulation Of Viscoplastic-type Non-newtonian Fluid Flows In Stenosed Arteries*** Angel Carmona; Oriol Lehmkuhl; Carlos David Pérez-Segarra; Asensi Oliva	***Complete Classification Of Discrete Resonant Rossby/drift Wave Triads On Periodic Domains*** Miguel Bustamante; Umar Hayat
Lagrangian Statistics Of Particles In Rotating Turbulent Convection Herman Clercx; Prasad Perlekar; Lorenzo Del Castello; Federico Toschi	***Synchronized Vortex Shedding And Sound Generation In A Corru*** Serena Russo; Flavio Gianneti; Paolo Luchini; Davide Tabore CANCELLED	***Motion Of Toroidal Bundles Of Vortex Rings*** Carlo F. Barenghi; Daniel H. Wacks; Andrew W. Baggaley	***Elastic Energy Transfer By Flexible Polymers In Fluid Turbulence*** Eberhard Bodenschatz; Heng-Dong Xi; Haitao Xu	***Inertial Waves And Wave Excitation Mechanisms In Annular Cavities: Simulations, Experiments And Theory*** Marten Klein; Ion Dan Borcia; Christoph Egbers; Abouzar Ghasemi V.; Uwe Harlander; Michael V. Kurgansky; Eberhard Schaller; Torsten Seelig; Andreas Will

11:00-11:30 **COFFEE BREAK**

Coffee break

11:30-12:45 **SB.1-5**

Room 1	Room 2	Room 3	Room 4	Room 5
SB.1 - PT1 (Particles) R. Monchaux	**SB.2. - BL1 (Boundary Layers)** M. Schultz	**SB.3 - PF1 (Pipe FLows)** B. Hof	**SB.4 - MHD1 (MHD)** N. Plihon	**SB.5 - GAF1 (Geo-Astro)** B. Dubrulle
Interaction Between Cloud Droplets And Turbulence Toshiyuki Gotoh; Yuya Kozaki; Yuki Suzuki; Takeshi Watanabe	***Nonlinear Vortex Structures In Boundary Layer Flow*** Hakan Wedin; Giuseppe Zampogna; Alessandro Bottaro	***Turbulent-laminar Bands In Plane Poiseuille Flow*** Laurette Tuckerman	***On The Four-fifths Law In Magnetohydrodynamic Turbulence*** Katsunori Yoshimatsu	***Lagrangian Reconstructions Of Surface Ocean Turbulence*** Stefano Berti; Guillaume Lapeyre
Modeling Of Turbulence Attenuation In Particle- Or Droplet-laden Flows Daniel Meyer	***A Nested-les Wall-modeling Approach For High Reynolds Number Wall Flows*** Yifeng Tang; Rayhaneh Akhavan	***Direct Numerical Simulation Of Turbulent Pipe Flow At High Reynolds Numbers.*** Bendiks Boersma	***Large Scale Magnetic Fields In Mhd Turbulence*** Alexandros Alexakis	***Statistical Mechanics Of Shallow Water Equations*** Adrien LICARI; Max POTTERS; Antoine VENAILLE; Freddy BOUCHET
Dynamics Of Homogeneous Shear Turbulence Laden With Finite-size Particles Mitsuru Tanaka; Takayuki Wazaki	***Quasi-steady Modulation Of Near-wall Turbulence*** Sergei Chernyshenko; Ivan Marusic; Romain Mathis	***Turbulence And Cyclic Bursts In Rotating Channel Flow*** Geert Brethouwer; Liang Wei; Philipp Schlatter; Arne V. Johansson	***An Exact Relation For Compressible Mhd Turbulence*** Supratik BANERJEE; Sébastien GALTIER	***Experimental Investigation Of Entrainment Into A Gravity Current*** Dominik Krug; Markus Holzner ; Beat Lüthi; Marc Wolf; Wolfgang Kinzelbach; Arkady Tsinober
Interfaces Of Long Bubbles In Horizontal Turbulent Slug Flow Luis Matamoros; Juliana Loureiro; Atila Freire	***Continuous Spectra And Entrainment Of Free-stream Vortical Disturbances In Asymptotic Suction Boundar Layer*** Xuesong Wu; Ming Dong	***Flow Around Circular Cylinder In A Pipe*** Venugopal Arumuru; Amit Agrawal; Prabhu S. V	***Effects Of Mhd Turbulence On Mean Magnetic Pressure And Formation Of Magnetic Structures*** Igor Rogachevskii; Axel Brandenburg; Koen Kemel; Nathan Kleeorin	***Stochastic Averaging And Jet Formation In Turbulent Planetary Atmospheres*** Freddy Bouchet; Cesare Nardini; Tomas Tangarife
Dns Of Turbulent Channel Flows Laden With Finite-size Particles At High Volume Fractions francesco picano; Wim-Paul Breugem; Luca Brandt	***Perturbed Cross-flow Boundary Layer: Nontrivial Effects Of The Obliquity Angle At Small And High Reynolds Numbers*** Francesca De Santi; Stefania Scarsoglio; William O. Criminale; Daniela Tordella	***Analysis Of Kinetic Energy Spectra In Oscillatory Pipe Flows*** Daniel Feldmann; Claus Wagner	***Energy Transfers For Large Eddy Simulations Of Magnetohydrodynamic Turbulence*** Mouloud Kessar; Guillaume Balarac; Franck Plunian	

12:45-14:15 **LUNCH**

Lunch (Lunch Hall)

14:15-15:10 **PLENARY SESSION 2**

Plenary Session 2 - Szymon Malinowski (Room 1)
Turbulent Entrainment And Mixing In Clouds

15:15-16:30

SC.1-5

Room 1	Room 2	Room 3	Room 4	Room 5
SC.1 - PT2 (Particles) J. Bec	**SC.2 - BL2 (Boundary Layers)** J. Westerweel	**SC.3 - PF2 (Pipe Flows)** G. Brethouwer	**SC.4 - MHD2 (MHD)** W. Bos	**SC.5 - GAF2 (Geo-Astro)** A. Alexakis
Identifying Particle Clusters In Turbulent Flow Christopher Nilsen; Helge Andersson	***Skin-friction Measurements In The Transitionally Rough Regime*** Michael Schultz; Karen Flack CANCELLED	***Experimental Investigation Of The Influence Of Curvature On Transition To Turbulence In A Pipe*** Jakob Kühnen; Michael Schwegel; Björn Hof; Hendrik C. Kuhlmann	***A Self-consistent Model For Turbulent Magnetic Reconnection*** Nobumitsu Yokoi; Katsuaki Higashimori; Masahiro Hoshino	***Random Transitions In Stochastic Turbulent Flows*** Freddy Bouchet; Jason Laurie; Eric Simonnet; Oleg Zaboronski
Accumulation Of Motile Microorganisms In Turbulence Caijuan Zhan; Gaetano Sardina; Enkeleida Lushi; Luca Brandt	***Experimental Investigation Of The Near And Far Field Structure Of High Reynolds Number Turbulent Boundary Layers*** Nicolas Buchmann; Callum Atkinson; Charitha de Silva; Nicholas Hutchins; Ivan Marusic; Julio Soria	***The Speed Of Turbulent - Laminar Fronts In Pipe Flow*** Dwight Barkley; Marc Avila; Bjoern Hof	***Mhd Turbulence At High Interaction Parameter*** Sophie MIRALLES; Gautier VERHILLE; Nicolas PLIHON; Jean-Francois PINTON	***Reproduction Of 2d Chaotic Zonal Flowon A Rotating Sphere*** Eiichi Sasaki; Shin-ichi Takehiro; Michio Yamada
Clustering Of Gyrotactic Microorganisms In Turbulent Flows Guido Boffetta; Michael Barry; Massimo Cencini; Eric Climent; Filippo De Lillo; William Durham; Roman Stocker	***Exploring The Connection Between Interfacial Bulging At The Edge Of The Turbulent Boundary Layer And Large-scale Motions Near The Wall*** Nicholas Hutchins; Jason Monty	***Localized Periodic Orbits In Plane Poiseuille Flow*** Stefan Zammert; Bruno Eckhardt	***Energy Spectrum For Quasi-static Mhd For High Interaction Parameters*** K. Sandeep Reddy; Mahendra Kumar Verma	***A New Formulation Of The Spectral Energy Budget Of The Atmosphere, With Application To Two High-resolution General Circulation Models*** PIerre Augier
Gyrotactic Clustering From Turbulent Acceleration Massimo Cencini	***Effects Of Hot-wire Measurement In Wall-bounded Flows Studied Via Direct Numerical Simulation*** Juan A. Sillero; Javier Jimenez	***Relaminarising Fully Turbulent Pipe Flow*** Baofang Song; Marc Avila; Björn Hof	***Fluid And Kinetic Modelling Of The Magnetized Kelvin-helmholtz Instability*** Pierre Henri; Francesco Califano; Stefano Markidis; Matteo Faganello; Giovanni Lapenta; Francesco Pegoraro	***Jet Formation By Potential Vorticity Mixing At Large And Small Scales*** Richard Scott
Effects Of Polymer Additives On Turbophoresis In A Turbulent Channel Flow Gaetano Sardina; Arash Nowbahar; Francesco Picano; Luca Brandt	***Spanwise Measurements Of Turbulence Structure Over Permeable Walls*** Yuka Nakagawa; Masayuki Kaneda; Kazuhiko Suga	***Localised Exact Solutions Of Pipe Flow*** Fernando Mellibovsky; Marc Avila; Roland Nicolas; Hof Björn	***The Three Dimensionalities Of Mhd Turbulence*** Alban Potherat; Klein Rico	***Stochastic Decomposition Of Atmospheric Turbulence*** Alan Morales; Matthias Wächter; Joachim Peinke Moved to session WC4 - PSM2 (Wednesday 16:15 - Room 4)

16:30-17:00

COFFEE BREAK

Coffee Break

17:00-18:45

SD.1-5				
Room 1	**Room 2**	**Room 3**	**Room 4**	**Room 5**
SD.1 - PT3 (Particles) H. Homann	**SD.2 - CTL1 (Control)** B. McKeon	**SD.3 - CT1 (Compressible)** P. Frick	**SD.4 - JET1 (Jets)** L. Danaila	**SD.5 - 2D (2D turbulence)** F. Bouchet
Sweep-stick Mechanisms Of Inertial Particles In Turbulence: A Comparison Of VoronoÏ Analysis In Dns And Experiments Martin Obligado; Alain Cartellier; Pablo Mininni ; Mickael Bourgoin	***Cooperative Drag Reducing Effect Of Longitudinal Riblets And Spanwise Wall Oscillations.*** Nikolay Nikitin; Ivan Vodopianov	***Studies Of Turbulent Mixing In Shock-driven Richtmyer-meshkov Instability*** Daniel Meiron; Manuel Lombardini; Dale Pullin	***Numerical Study Of A Quasi-two-dimensional Confined Turbulent Jet*** Rustam Mullyadzhanov; Boris Ilyushin; Muhamed Hadžiabdić; Kemal Hanjalic CANCELLED	***Turbulent Coherent Structures Driven In Parametrically Excited Surface Ripples*** Michael Shats; Hua Xia; Nicolas Francois; Horst Punzmann
Particle Clustering In Radiation induced Turbulence Rémi Zamansky; Filippo Coletti; Marc Massot; Ali Mani	***Universal Friction Law For Turbulent Boundary Layers With Wall Suction*** Igor Vigdorovich	***Exact Kolmogorov Law For Compressible Turbulence*** Sebastien Galtier; Supratik Banerjee	***The Turbulent/non-turbulent Interface And Viscous Superlayer In Turbulent Planar Jets*** Carlos B. da Silva; Rodrigo R. Taveira	***Hilbert-based Vorticity Statistics In Two-dimensional Turbulence*** Huanshu Tan; Yongxiang Huang; Jianping Meng
Disentangled Effects Of The Reynolds And Stokes Numbers On The Clustering Of Heavy Particles In Turbulence Lionel Fiabane; Romain Volk; Jean-François Pinton; Mickaël Bourgoin	***Experimental Investigation Of Drag Reduction Effect In Wall Turbulence Over Travelingwave-like Rubber Sheet*** Yuho Ishiwata; Hiroya Mamori; Kaoru Iwamoto; Akira Murata	***Reshock Of Self-similar Multimode Richtmyer--meshkov Instability At High Atwood Number In Heavy -light And Light-heavy Configurations*** Mike Probyn; Ben Thornber	***Analysis Of Dynamic-controlled Round Jet Using Pod And Dmd*** Koichi TSUJIMOTO; Noritaka SHIBATA; Toshihiko SHAKOUCHI; Toshitake ANDO	***Faraday Surface Ripple Forced 2d Turbulence*** Nicolas FRANCOIS; Hua XIA; Michael SHATS
Influence Of Preferential Concentration On The Settling Of Heavy Particles In Homogeneous Turbulence Romain Monchaux; Anne Dejoan	***Effectiveness Of Spanwise Forcing For Turbulent Drag Reduction At Higher Re*** Davide Gatti; Maurizio Quadrio; Cameron Tropea; Bettina Frohnapfel	***Study On The Interaction Between Low-mach-number Grid Turbulence And Spherical Shock Wave*** Takuya Kitamura; Kouji Nagata; Yasuhiko Sakai; Akihiro Sasoh; Osamu Terashima	***Incomplete Similarity In A Plane Turbulent Wall Jet On A Rough Surface*** Zhujun Tang; Noorallah Rostamy; Donald J Bergstrom; James D Bugg; David Sumner	***Experimental Investigation Of Large Scale Circulation Generated Over A 2d Turbulent Flow*** Johann Herault; Francois Petrelis
Settling Velocity Of Small Particles In High-resolution Homogenous Isotropic Turbulence Bogdan Rosa; Orlando Ayala; Hossein Parishani; Lian-Ping Wang	***Wall Turbulence Control By Spanwise Traveling Waves*** Wenxuan Xie; Maurizio Quadrio	***The Influence Of The Fluid Acceleration Term On The Simulation Of A Particle-laden Compressible Jet With Shock Waves*** Flavia Cavalcanti Miranda; Arne Heinrich; Jörn Sesterhenn	***Liquid Jet Simulation Using One dimensional Turbulence*** Falko Schulz; Christoph Glawe; Heiko Schmidt; Alan Kerstein	***On Scalings In Forced 2d Turbulence*** Jérôme Fontane; Richard K. Scott; David G. Dritschel CANCELLED
Experimental Study Of Clustering Of Floaters On The Free Surface Of A Turbulent Flow Pablo Gutierrez; Sebastien Aumaitre	***Reactive Control Of Spatially Developing Turbulent Boundary Layer*** Alexander Stroh; Yosuke Hasegawa; Bettina Frohnapfel	***Dns Of Boundary Layer Transition At Mach 6*** Dmitry Khotyanovsky; Alexey Kudryavtsev	***Direct Numerical Simulation Of The Heat Transfer Of An Impinging Jet*** Thibault Dairay; Véronique Fortuné; Eric Lamballais; Laurent-Emmanuel Brizzi	***Fokker-planck Description Of The Inverse Cascade In Two-dimensional Turbulence*** Oliver Kamps; Michel Voßkuhle
		Energy Cascade And Scaling In Supersonic Turbulence Alexei Kritsuk; Rick Wagner; Michael Norman	***Direct Simulation Of Turbulent Entrainment In A Temporal Plane Jet*** Maarten van Reeuwijk; Markus Holzner	

19:00-20:30

WELCOME COCKTAIL
Welcome Cocktail (Lunch Hall)

Monday, 2 September 2013

8:30-9:25

PLENARY SESSION 3

Plenary Session 3 - François Daviaud (Room 1)
Instability Of Turbulence

9:30-10:45

MA.1-5

Room 1	Room 2	Room 3	Room 4	Room 5
MA.1 - PT4 (Particles) R. Zamanski	**MA.2 - BL3 (Boundary Layers)** Y. Hasegawa	**MA.3 - IT1 (Instability & Transition)** Y. Duguet	**MA.4 - CONV1 (Convection)** M. Creyssels	**MA.5 - ROT1 (Rotation)** P. Cortet
Gravity Effects On Particle Dynamics In Wall Turbulence Helge I. Andersson; Christopher Nilsen; Lihao Zhao	***Turbulent Spots In Channel Flow: From Transient Growth To Self-sustainability*** Grégoire Lemoult; Jean-Luc Aider; José Eduardo Wesfreid	***Transition To Turbulence In Oscillatory Superflows*** Risto Hänninen; Michael Niemetz; Wilfried Schoepe	***On The Motion Of Large-scale Circulations In Mixed Convection*** Daniel Schmeling; Johannes Bosbach; Claus Wagner	***Localized Unstable Modes In A Precessing Sphere*** Shigeo Kida
Re-suspension Of Particles In An Oscillating Grid Turbulent Flow Hadar Traugott; Alex Liberzon	***Characteristics Of The Interfaces In A Turbulent Boundary Layer*** Jerke Eisma; Gerrit Elsinga; Jerry Westerweel	***Pipe Flow And Ultra-long Fiber Laser*** Gregory Falkovich	***Lagrangian Measurements Of Temperature And Velocity In Turbulent Thermal Convection*** Olivier Liot; Fanny Seychelles; Julien Salort; Eleonore Rusaouen; Marius Tanase; Francesca Chillà; Bernard Castaing; Yoann Gasteuil; Jean-François Pinton	***The Unsteady Flow Within A Rotating Torus*** Jim Denier; Richard Clarke; Hewitt Richard; Andrew Hazel
Experimental Validation Of A Constant Surface Shear Stress In Particle Saltation Layers Benjamin Walter; Stefan Horender; Christian Vögeli; Michael Lehning	***The Significance Of Hairpin Vortices In Turbulent Boundary Layers*** Georg Eitel-Amor; Ramis Orlu; Philipp Schlatter	***Optimal Amplification Of Streamwise Streaks In Plane Jets And Their Stabilizing Effect On The Inflectional Instability*** Gerardo Del Guercio; Carlo Cossu; Gregory Pujals	***The Large-scale Circulation In Turbulent Rayleigh--b\'enard Convection In An Aspect Ratio 1 Cell At Large Rayleigh Numbers*** Dennis Paulus Maria van Gils; Xiaozhou He; Guenter Ahlers; Eberhard Bodenschatz	***Laboratory Simulation Of Zonation In Rotating Flows*** Stefania Espa; Gabriella Di Nitto
Bringing Clouds Into The Lab Altug Yavuz; Rudie Kunnen; Herman Clercx; GertJan Heijst	***Flow Visualization Of Hairpin Vortices In A Mach 3.0 Flat-plate Boundary Layer*** Lin He; Shihe Yi; Zhi Chen; Yangzhu Zhu	***Subcritical Transition To Turbulence: A Model Inspired From The Physics Of Glasses*** Olivier Dauchot; Eric Bertin	***Measurement Of The Temperature Field In A Rayleigh-benard Turbulent Convection Cell By Laser Induced Fluorescence*** Denis Funfschilling; Guillaume Castanet; Nicolas Rimbert	***Symmetry-breaking Flows In Precessing Spherical Containers*** Caroline Nore; Rainer Hollerbach; Francky Luddens; Jacques Leorat; Philippe Marti; Stijn Vantieghem
Studies Of Gas-particle Interaction: Implications For The Streaming Instability In Protoplanetary Disks Holly Capelo; Haitao Xu; Michiel Lambrechts; Anders Johansen; Eberhard Bodenschatz	***Imaging Of Micro-ramps In Supersonic Flow And The Effect On Flow Over Double Wedge*** Zhang Qinghu; Yi Shihe; He Lin; Chen Zhi; Zhu Yangzhu	***The Complex Unsteady Flow Within A Fluid Filled Annulus And Its Transition To Turbulence*** Sophie Calabretto; Jim Denier; Trent Mattner	***Numerical Investigation Of Flow reversals In A Flat Rayleigh-Bénard Cell*** Anne Sergent; Bérengère Podvin	***Turbulence, Intertial Waves And Vortex Column Formation In A Rotating Fluid*** Matias Duran Matute; Jan-Bert. FLOR; Fabien Godeferd

10:45-11:15

COFFEE BREAK

Coffee Break

11:15-12:45

MB.1-5

Room 1	Room 2	Room 3	Room 4	Room 5
MB.1 - PT5 (Particles) L. Brandt	**MB.2 - BL4 (Boundary Layers)** A. Busse	**MB.3 - IT2 (Instability & Transition)** M. Rossi	**MB.4 - CONV2 (Convection)** J. Salort	**MB.5 - FA1 (Fundamental Aspects)** F. Moisy
Particles In Homogeneous Shear Turbulence Michel van Hinsberg; Herman Clercx; Prasad Perlekar; Federico Toschi	***On The Validity Of The Law Of The Wall*** Gary N Coleman; Philippe R Spalart	***Transition To Turbulence In 4he Due To Mechanical Oscillators*** David Schmoranzer; Martial Defoort; Sebastien Dufresnes; Eddy Collin; Henri Godfrin; Ladislav Skrbek	***Mathematical Analysis Of Heat Transport In Turbulent Convection*** Charles R. Doering	***Explicit Formula Of Energy-conserving, Fokker-planck-type Collision Term For Single-species Point Vortex System*** Yuichi Yatsuyanagi; Tadatsugu Hatori
Tumbling Rates In Turbulent And Random Flows Kristian Gustavsson; Jonas Einarsson; Bernhard Mehlig	***Energy Growth In Transient Channel Flow*** Shuisheng He; Mehdi Seddighi	***Non Modal Subcritical Transition Of Channel Entry Flow}*** Marc BUFFAT; Lionel Le Penven; Anne Cadiou	***Temperature And Velocity Gradients In Turbulent Convection*** Joerg Schumacher; Janet Scheel; Mohammad Emran	***New Turbulent Scaling Laws From The Multi-point Correlation Equations*** Andreas Rosteck; Martin Oberlack
Effect Of Flow Anisotropy On Dispersion And Distribution Of Particles Armann Gylfason; Chung-min Lee; Prasad Perlekar; Federico Toschi	***Dns Of Channel Flow With Two-scale Surface Roughness On One Wall*** Hiroki Suzuki; Richard Perkins	***Transitional Convective Structures In A Liquid Layer With A Drift Flow*** Galina Rybushkina; Vladimir Reutov	***Temperature And Velocity Fluctuations In Forced Stably Stratified And Convective Turbulent Flows: Experiments And Theory*** Alexander Eidelman; Tov Elperin; Igal Gluzman; Nathan Kleeorin; Igor Rogachevskii	***Length Scale To Determine The Rate Of Energy Dissipation In Turbulence*** Hideaki Mouri
Relative Velocities Of Inertial Particles At The Dissipative Scales Of Turbulence Ewe-Wei Saw; Gregory P. Bewley; Samriddhi S. Ray; Holger Homann; Jeremie Bec; Eberhard Bodenschatz	***Higher Order Moments Of Passive And Reacting Scalars And Their Gradients In Turbulent Wall-jets*** Zeinab Pouransari; Luca Biferale; Arne Johansson	***Interpretation Of The Mechanism Responsible For The Persistence Of A Laminar Region In Turbulent Duct Flow*** Gerti Daschiel; Bettina Frohnapfel; Jovan Jovanovic	***Available Potential Energy In Rayleigh-benard Convection*** Graham Hughes; Bishakhdatta Gayen; Ross Griffiths	***New Conservation Laws For Helically Symmetric Flows And Their Importance For Tubulence Theory*** Olga Kelbin; Alexei Cheviakov; Martin Oberlack; Ivan Delbende
Turbulent Dispersion Of Heavy Droplets Humberto Bocanegra Evans; Nico Dam; Willem van de Water	***New Mean Velocity Scaling Laws For Turbulent Poiseuille Flow With Wall Transpiration*** Victor Avsarkisov; Martin Oberlack; Sergio Hoyas; George Khujadze	***Mean Field Model For Turbulence Transition In Plane Poiseuille Flow*** Michael Rath; Bruno Eckhardt	***On The Applicability Of Falkner--skan Boundary Layer Equations To Turbulent Thermal Convection*** Olga Shishkina; Susanne Horn; Sebastian Wagner	***Estimation Of Turbulence-development By A Multifractal Theory*** Toshihico Arimitsu; Naoko Arimitsu; Kohei Takechi; Yukio Kaneda; Takashi Ishihara
Relative Velocities Of Inertial Particles In Random Flows Kristian Gustavsson; Bernhard Mehlig	***Linear Dynamics Of A Boundary Layer Flow Over A Cylindrical Rugosity*** Jean-Christophe Loiseau; Jean-Christophe Robinet; Emmanuel Leriche	***Higher Harmonic Resonance In Laterally Heated Flow (lhf) With Poiseuille Flow Component (pfc)*** Takeshi Akinaga; Tomoaki Itano; Kaoru Fujimura; Sotos Generalis	***Description Of Turbulent Rayleigh-bénard Convection By Pdf Methods Exhibits Limit Cycle Behavior*** Johannes Lülff	***On Relationship Between Instantaneous And Statistical Properties Of The Deterministic Turbulence*** Vladimir Borodulin; Yury Kachanov; Dmitry Mischenko

12:45-14:15

LUNCH

Lunch (Lunch Hall)

14:15-15:10

PLENARY SESSION 4

Plenary Session 4 - Haitao Xu (Room 1)
Lagrangian Single-particle Statistics Of Fluid Turbulence

15:15-16:15

MC.1-5				
Room 1	**Room 2**	**Room 3**	**Room 4**	**Room 5**
MC.1 - LT2 (Lagrangian) L. Biferale	**MC.2 - CTL2 (Control)** D. Fabre	**MC.3 - CRYO2 (Cyogenics)** L. Skrbek	**MC.4 - MHD3 (MHD)** G. Verhille	**MC.5 - FA2 (Fundamental Aspects)** K. Schneider
Experimental Observation Of A Single Lagrangian Scale Of Particle Dispersion In Developed Two-dimensional Turbulence Hua Xia; Nicolas Francois; Horst Punzmann; Michael Shats	***Steady Suction And Pulsed Blowing For Effective Bluff-body Flow Control*** Avi Seifert; Tom Shtendel	***Systematics Of Turbulence In The Dissipationless, Unforced, 2d, Fourier-truncated Gross-pitaevskii Equation*** Rahul Pandit; Vishwanath Shukla; Marc Brachet	***The Role Of Temporal Coherence In Small And Large-scale Dynamos At High Rm*** Steven Tobias; Fausto Cattaneo	***Finite-time Blow-up Problem And The Maximum Growth Of Palinstrophy*** Bartosz Protas; Diego Ayala
Multiparticle Dispersion In Homogeneous Isotropic Turbulence Benjamin Devenish	***Feed-forward Control In An Experimental Channel Flow*** Fabien JUILLET; Beverley McKeon; Peter Schmid	***Spectra In Gross-pitaevskii Turbulence Within A Spectral Closure Approximation*** Kyo Yoshida; Toshihico Arimitsu	***Global Bifurcations To Subcritical Turbulent Magnetorotational Dynamo Action In Keplerian Shear Flow*** Francois Rincon; Antoine Riols; Carlo Cossu; Geoffroy Lesur; Pierre-Yves Longaretti ; Gordon Ogilvie; Johann Herault	***Dynamic Geometrical Analysis Of High-enstrophy Structures In Isotropic Turbulence*** Yuji Hattori; Takashi Ishihara
Deformation Of Tetrahedra In Turbulence Jennifer Mutschall; Haitao Xu; Alain Pumir; Eberhard Bodenschatz	***Experimental Study Of Open- And Closed-loop Control Of A Turbulent Mixing Layer*** Vladimir Parezanovic; Jean-Charles Laureate ; Carine Fourment; Joel Delville; Laurent Cordier; Bernd R. Noack	***Energy Spectra And Characteristic Scales Of Quantum Turbulence Investigated By Numerical Simulations Of The Two-fluid Model*** Philippe-E Roche; Emmanuel Lévêque	***Scaling Laws For Convective Dynamos*** Krzysztof Mizerski; Chris Jones	***Statistics Of The Velocity Gradient Tensor Perceived By A Set Of Four Tracer Particles In Homogeneous Rotating Turbulence*** Aurore Naso; Fabien S. Godeferd
Statistics Of Velocity Differences Between Lagrangian Tracers In A Developed Turbulent Flow Jeremie Bec; Rehab Bitane; Holger Homann	***Open-loop Control Of An Axisymmetric Turbulent Wake Using High-frequency Periodic Jet Blowing*** Anthony Oxlade; Jonathan Morrison	***Nonlocal Model Of Superfluid Turbulence*** Lidia Saluto; David Jou; Maria Stella Mongiovì	***Turbuence In Geodynamo Simulations*** Nathanael Schaeffer; Alexandre Fournier; Julien Aubert	***Nonlocal Pressure Contributions To The Small-scale Statistics Of Homogeneous Isotropic Turbulence*** Michael Wilczek; Charles Meneveau

16:15-16:45

COFFEE BREAK
Coffee Break

16:45-17:45

MD.1-5				
Room 1	**Room 2**	**Room 3**	**Room 4**	**Room 5**
MD.1 - PT6 (Particles) S. Chibbaro	**MD.2 - ENG1 (Engineering)** D. Tordella	**MD.3 - RF (Reacting Flows)** M. Gorokhovski	**MD.4 - MHD4 (MHD)** A. Potherat	**MD.5 - FA3 (Fundamental Aspects)** B. Castaing
Stokes Drift For Inertial Particles Transported By Water Waves Francesco Santamaria; Guido Boffetta; Marco Martins Afonso; Miguel Onorato; Andrea Mazzino	***The Structure Of The Near Wall Sublayer In Rotor/stator Non-isothermal Flows*** Kamil Kiełczewski; Ewa Tuliszka-Sznitko	***Experimental Investigation Of Eddy Diffusivity In A Reactive Liquid Jet*** Tomoaki Watanabe; Yasuhiko Sakai; Kouji Nagata; Osamu Terashima; Yasumasa Ito	***Hall Effects On Energy Transfer Of Isotropic Mhd Turbulence*** Hideaki Miura; Keisuke Araki	***Generation Mechanism Of Hierarchy Of Coherent Vortices In Turbulence*** Susumu Goto; Genta Kawahara
The Slip Direction Of Large-size Particles In Turbulent Flows Mamadou Cisse; Holger Homann; Jeremie Bec	***The Comparison Of Numerical And Experimental Investigation Of Flow Inside Reversing Chamber*** CANCELLED Robert Kłosowiak; Jarosław Bartoszewicz	***Effective Rates In Dilute Reaction-advection Systems*** Giorgio Krstulovic	***Large Scale Forcing Of A Turbulent Plasma Dynamo*** Jorge Morales; Wouter Bos; Fabien Godeferd; Nicoles Plihon	***Vorticity Moments For Thin And Hollow Anti-parallel Vortex Tube*** Robert Kerr
Memory Effects In The Advection Of Inertial Particles Anton Daitche; Tamás Tél	***Turbulent Flow Field Measurements In A Fan-stirred Combustion Vessel*** Bénédicte Galmiche; Fabien Halter; Nicolas Mazellier; Fabrice Foucher	***Curvature And Velocity Strain Dependencies Of Burning Speed In A Turbulent Premixed Jet Flame*** Guido Troiani; Francesco Battista; Francesco Picano; Carlo Massimo Casciola	***Developing Of The Ionospheric Plasma Turbulence Over The Epicenters Of The Strong Earthquakes. Discussion Of The Results Of The Demeter Satellite*** Malgorzata Kosciesza; Jan Blecki; Michel Parrot; Roman Wronowski	***Direct Vorticity Measurement In Turbulence*** Huixuan Wu; Haitao Xu; Eberhard Bodenschatz
Effect Of Turbulent Fluctuations On The Drag Force And Boundary Layer Of A Towed Sphere Holger Homann; Jérémie Bec; Rainer Grauer	***Large-eddy Simulation Of Underexpanded Natural Gas Jets*** Ville Vuorinen; Christophe Duwig; Ossi Kaario; Martti Larmi; Bendiks Boersma	***Turbulence-combustion Interaction In H2-co/air Bunsen Flame*** Francesco Battista; Francesco Picano; Guido Troiani; Carlo Massimo Casciola	***Effect Of Subgrid Scale Turbulence On Particle Acceleration In Solar Wind Turbulence*** Bernard Knaepen; Lapo Bettarini	***On Transition Via Transient Growth In Couette Flow*** Michael Karp; Jacob Cohen

17:45-18:15 **Free time**

18:15-20:00 **Guided walking tour of historical Lyon**

Visit of the old city of Lyon. Departure from the conference site. The end of the tour will take you to the "Palais du Commerce" where the gala of the conference will take place.

20:00-23:00

GALA

Gala (Palais du Commerce)

The ETC14 Gala will be held at :
Palais du Commerce
place de la Bourse LYON 69002

Tuesday, 3 September 2013

8:30-9:25

PLENARY SESSION 5

Plenary Session 5 - Beverly McKeon (Room 1)
A Systems Approach To Wall Turbulence

9:30-10:45

TA.1-5

Room 1	Room 2	Room 3	Room 4	Room 5
TA.1 - FA4 (Fundamental Aspects) L. Moriconi	**TA.2 - PF3 (Pipe Flows)** L. Tuckerman	**TA.3 - IT3 (Instability & Transition)** B. Pier	**TA.4 - CONV3 (Convection)** D. Funfschilling	**TA.5 - ROT2 (Rotation)** C. Nore
Thin Shear Layers In High Reynolds Number Turbulence - Dns Results Takashi Ishihara; Julian Hunt; Yukio Kaneda	***Patterned Turbulence And Relaminarization In Mhd Pipe And Duct Flows*** Dmitry Krasnov; Oleg Zikanov; Thomas Boeck	***Camassa-holm Type Equations And Vortexons In Axisymmetric Poiseuille Pipe Flows*** Francesco Fedele; Denys Dutykh	***Numerical Simulations Of Rayleigh-benard Systems With Non-homogeneous Temperature Sources*** Patrizio Ripesi; Luca Biferale; Mauro Sbragaglia; Achim Wirth	***The Effects Of System Rotation On Kinematics Of Vortical Structure In Turbulent Channel Flow*** Oaki Iida
Thin Shear Layers In High Reynolds Number Turbulence - A Coherent-structure Model Julian Hunt; Takashi Ishihara; Yukio Kaneda	***Turbulent Pipe Flow: New Dns Data And Large-scale Structures*** George El Khoury; Philipp Schlatter; Geert Brethouwer; Arne V. Johansson	***Secondary Flow Formation Over Localized Heat Source*** Andrey Sukhanovskiy; Anna Evgrafova; Elena Popova	***Measurement Of The Local Convective Heat Flux In Thermally-driven Turbulence With Rough Surfaces*** Yi-Chao Xie; Rui Ni; Xiao-Ming Li; Ping Wei; Ke-Qing Xia	***Dns Of Inhomogeneous Turbulence Under Rotation*** Avishek Ranjan; Peter A Davidson
Properties Of The Curvature Tensor Of Streamtubes In Turbulent Flows Jonas Boschung; Charles Meneveau; Norbert Peters	***Coherent Motions In Turbulent Flows Through Curved Pipes*** Philipp Schlatter; Azad Noorani; Athanasia Kalpakli; Ramis Örlü	***Experimental Investigation Of Gap Instability And Gap Vortex Street Development In An Eccentric Annular Channel*** George Choueiri; Stavros Tavoularis	***Towards The Numerical Investigation Of Rough Surfaces In Quasi Two-dimensional Rayleigh-benard Convection*** Sebastian Wagner; Olga Shishkina	***Restoring Isotropic Universality In Freely Decaying Rotating Turbulence*** DELACHE ALEXANDRE; CAMBON CLAUDE; GODEFERD Fabien
The Effects Of Pressure Hessian On Fluid Deformation Yi Li	***Scalings Of The Outer Energy Source Of Wall-turbulence*** Andrea Cimarelli; Elisabetta De Angelis; Philipp Schlatter; Geert Brethouwer; Alessandro Talamelli; Carlo Massimo Casciola	***Bifurcations From Double-layered Streamwise-independent Vortex Flow In Rotating Plane Couette Flow*** Masato NAGATA	***The Effect Of Velocity Boundary Conditions On $2d$ Rayleigh-Benard Turbulence*** Rodolfo Ostilla Mónico; Erwin P. van der Poel ; Roberto Verzicco; Detlef Lohse	***Direct Numerical Investigation Of The Stably-stratified Ekman Layer*** Enrico Deusebio; Philipp Schlatter; Geert Brethouwer; Erik Lindborg
Comparison Between Prandtl, Navier-stokes And Euler Solutions For A Vortex Dipole Impinging On A Wall Romain Nguyen van yen; Matthias Waidmann; Marie Farge; Kai Schneider; Rupert Klein	***The Evolution Of Transitional Flow Structures Along A 3200 D Pipe In The Decay And Growth Regimes*** Özgür Ertunç; Jens Krauss; Hermann Lienhart; Hannes Schweiger; Horst Weber; Antonio Delgado CANCELLED	***Stabilizing Effect Of Longitudinal Wall Oscillation On 2d Or 3d Wave In The Plane Poiseuille Flow*** Takashi Atobe	***Roughness-enhanced Heat-flux In Turbulent Thermal Convection*** Julien Salort; Éléonore Rusaouën; Olivier Liot ; Jean-Christophe Tisserand; Mathieu Creyssels; Bernard Castaing; Francesca Chillà	***Scale-dependent Statistics Of Lagrangian And Eulerian Acceleration In Rotating And Sheared Homogeneous Turbulence*** Frank G. Jacobitz; Kai Schneider; Wouter Bos; Marie Farge

10:45-11:15

COFFEE BREAK

Coffee Break

11:15-12:45

TB.1-5

Room 1	Room 2	Room 3	Room 4	Room 5
TB.1 - FA5 (Fundamental Aspects) Y. Li	**TB.2 - CTL3 (Control)** G. Balarac	**TB.3 - IT4 (Instability & Transition)** F. Fedele	**TB.4 - CONV4 (Convection)** F. Chilla	**TB.5 - GAF3 (Geo - Astro)** S. Berti
The Lack Of Return To Isotropy In Decaying, Axisymmetric, Saffman Turbulence Peter Davidson; Naoya Okamoto; Yukio Kaneda	***Reduction Of Turbulent Wall Friction By Spinning Discs*** Pierre Ricco; Stanislav Hahn	***Stewartson Layer Instability In The Problem Of The Vibrational Hydrodynamic Top*** Viktor Kozlov; Nikolai Kozlov; Stanislav Subbotin	***Ultimate Rayleigh-bénard And Taylor-couette Turbulence*** Detlef Lohse; Siegfried Grossmann; Sander Huisman; Rodolfo Ostilla Monico; Erwin van der Poel; Chao Sun; Richard Stevens	***Transition To Turbulence In Stratified Shear Flow Through An Inclined Square Duct*** Colin R. Meyer; Paul F. Linden
Experimental And Computational Investigation Of A Fractal Grid Wake Wided Medjroubi; Hannes Hochstein; Andre Fuchs; Gerd Gülker; Joachim Peinke	***Experimental Investigation Of Nanosecond Plasma Actuators Effect On A Subsonic Jet Noise*** Jean-Charles Laurentie; Peter Jordan; Nicolas Benard; Joel Delville	***Bi-stability Of The Turbulent Wake Past Parallelepiped Bodies With Various Aspect Ratios And Ground Effect*** Mathieu Grandemange; Marc Gohlke; Olivier Cadot	***Temperature Fluctuations Near The Ultimate-state Transition In Turbulent Thermal Convection*** Xiaozhou He; Dennis van Gils; Eberhard Bodenschatz; Guenter Ahlers	***A Forced Dissipated Perspective On The Ocean Mesoscale Turbulence*** Guillaume Roullet; Xavier Capet; Radjesvarane Alexandre
Breakdown Of Kolmogorov's Scaling In Grid Turbulence Lyazid Djenidi; Robert Antonia; Sedat Tardu	***Symmetries In The Turbulent Wake Of A Sphere*** Marc Gohlke; Mathieu Grandemange; Olivier Cadot	***Three Helical Vortices : Dynamics And Instability*** Maurice Rossi; Ivan Delbende	***Logarithmic Mean Temperature Profiles In Rayleigh-bénard Convection Simulations*** Erwin van der Poel; Rodolfo Ostilla Mónico; Siegfried Grossmann; Detlef Lohse	***Pair Dispersion In Atmospheric Boundary Layers*** Irene Mazzitelli; Alessandra Lanotte; Francesco Fornarelli; Paolo Oresta CANCELLED
Experimental Study Of Isotropic Turbulence Under Time-dependent Forcing Fabio Di Lorenzo; Haitao Xu; Eberhard Bodenschatz	***Effect Of Freestream Turbulence On Crossflow Instability*** Seyed Mohammad Hosseini; Ardeshir Hanifi Dan Henningson	***Absolute Instabilities In Eccentric Taylor-couette-poiseuille Flow*** Colin Leclercq; Benoît Pier; Julian Scott	***Characterization Of Large Scale Quantities And Energy Spectrum For Very Large Prandtl Numbers*** Ambrish Pandey; Mahendra Kumar Verma	***Direct Numerical Simulation Of Laminarization In The Atmospheric Boundary Layer*** Judith Donda; Bas Van de Wiel; Gert-Jan Van Heijst; Herman Clercx
Reynolds Number Dependencies In Classical Grid Turbulence Michael Sinhuber; Gregory P. Bewley; Bodenschatz Eberhard; Margit Vallikivi; Marcus Hultmark; Alexander Smits	***Lattice Boltzmann Simulations Of Drag Reduction By Super-hydrophobic Surfaces*** Amirreza Rastegari; Rayhaneh Akhavan	***Experimental Study Of Distributed Receptivity Coefficients At Excitation Of Goertler Modes By Freestream Vortices*** Adnrey Ivanov; Yury Kachanov; Dmitry Mischenko	***Local Boundary Layer Heat Transport In Turbulent Rayleigh-Benard Convection*** Ronald du Puits; Li Ling; Christian Resagk; André Thess	***Well Resolved Measurements Of The Turbulent Fluxes In The Atmospheric Surface Layer*** Marcus Hultmark; Gilad Arwatz; Margit Vallikivi
Spectal Dimension Of Fractal Clusters In Turbulent Flows Michael Wilkinson	***Influence Of Liquid-gas Interface Dynamics In Superhydrophobic Surfaces For Drag Reduction*** Jongmin Seo; Ricardo García-Mayoral; Ali Mani	***Relative Periodic Edge Orbits In Plane Channel Flow*** Subhandu Rawat; Carlo Cossu; François Rincon	***Prandtl Number Dependence Of Statistics In Turbulent Rayleigh-Benard Convection*** Mohammad Emran; Nan Shi; Jörg Schumacher	***Detailed Inner Structure Of Double-diffusive Intrusions*** Takashi Noguchi; Hiroshi Niino

12:45-14:00

LUNCH

Lunch (Lunch Hall)

14:00-15:10

PLENARY SESSION 6

Plenary Session 6 - Axel Brandenburg (Room 1)
Numerical Simulations Of Turbulent Dynamos

15:15-16:30

TC.1-5				
Room 1	**Room 2**	**Room 3**	**Room 4**	**Room 5**
TC.1 - PT7 (Particles) M. Cencini	**TC.2 - BL5 (Boundary Layers)** S. Tardu	**TC.3 - NUM1 (Numerics)** E. Leveque	**TC.4 - MHD5 (MHD)** F. Rincon	**TC.5 - GAF4 (Geo-Astro)** P. Odier
Acceleration Statistics Of Light Particles In Turbulence Vivek N. Prakash; Yoshiyuki Tagawa; Enrico Calzavarini; Julian Martinez Mercado; Federico Toschi; Detlef Lohse; Chao Sun	***Direct Numerical Simulation Of Roughness And Unsteady Wake Effect On Separated Boundary Layers*** Ayse G. Gungor; Mark P. Simens	***Large-eddy Simulation Of Channel Gas-particle Flow Induced By Wall Injection With Forced Pressure Oscillations*** Konstantin Volkov; Vladislav Emelyanov	***Turbulence In The Magnetostrophic Regime*** Simon Cabanes; Henri-Claude Nataf; Nathanael Schaeffer	***Sidewall Effects In Confined Turbulent Rotating Rayleigh-bénard Convection*** Rudie Kunnen; Yoann Corre; Herman Clercx
Dynamics Of Large Particles In A von KÁrmÁn Swirling Flow Nathanaël Machicoane; Lionel Fiabane; Robert Zimmermann; Jean-François Pinton; Mickael Bourgoin; Romain Volk	***Phase Dependency Of Near-wall Streamwise Vortices And Associated Reynolds Shear Stresses Close To Spanwise Oscillating Wall*** Aiko Yakeno; Yosuke Hasegawa; Nobuhide Kasagi	***Study Of Flow Instability Due To Streamwise Inter-rod Gapping*** Kristin Newlands; Shuisheng He; Yakun Guo	***Vortex Generation By Magnetic Dipole Field In A Liquid Metal Duct Flow*** Saskia Tympel; Thomas Boeck; Dmitry Krasnov; Jörg Schumacher	***Tornado-like Vortices Generation Due To Air Turbulent Convection*** Aleksei Varaksin; Michael Romash; Viktor Kopeitsev
Experimental Study Of Large Suspended Anisotropic Particles In Turbulence CANCELLED Gabriele Bellani; Evan A. Variano	***Turbulent Flow Over Superhydrophobic Surfaces - Roughness Versus Slip*** Angela Busse; Neil Sandham	***Numerical Von Kàrmàn Flow Forcing By Two Rotating Propeller Using Penalization Method*** Yannick Ponty; Sebastian Kreuzahler; Holger Homann; Rainer Grauer	***Direct Numerical Simulation Of Spanwise Lorentz Force Oscillations In Turbulent Channel Flow At Low Reynolds Number*** Atilla Altintas; Lars Davidson	***An Experimental Study Of Baroclinic Wave Transitions In A Differentially Heated Rotating Annulus With Sloping Bottom Topography*** Miklos Vincze; Uwe Harlander; Christoph Egbers; Thomas von Larcher
Direct Numerical Simulation Of Algae Migration In A Lake Evelyn Aparicio Medrano; Bas van de Wiel; Rob Uittenbogaard; Herman Clercx	***Time-resolved Evolution Of Wall-bounded Direct And Inverse Cascades In Turbulent Channels At Re =4000*** Adrián Lozano-Durán; Javier Jiménez	***A Subgrid-scale Model For Les Based On The Physics Of Inter-scale Energy Transfer In Turbulence*** Julian Andrzej Domaradzki; Brian Wayne Anderson	***A New Spectral Method For Direct Numerical Simulations Of Magnetohydrodynamic Channel Flows*** Kacper Kornet; Alban Potherat	***Cell Formation In Thin Spherical Shells With Lateral Temperature Gradient Between Polar And Equatorial Regions.*** Christoph Egbers; Florian Zaussinger
Lagrangian Conditional Statistics Of Inertial Particle Flows Sergio Chibbaro; Cristian Marchioli; Maria Vittoria Salvetti; Alfredo Soldati	***Experimental Investigation Of Heat Transfer Over Drag-reducing Riblets*** Mathieu Creyssels; Christian Nicot	***Numerical Modeling Of Synthetic Turbulence Generation By Using Zonal Rans/les Method*** Alibek Issakhov	***Effect Of Transverse Magnetic Field On Stability Of Plane Poiseuille Magnetohydrodynamic Flow*** Vivek Subramaniam; Pranav Kamat; Sameen A	***Entraining Structures In Laboratory Analog Of Clouds: Temperature Inversion And Overshooting Updrafts*** Anna Górska; Szymon Malinowski; Slawomir Błoński; Tomasz Kowalewski; Piotr Korczyk; Wojciech Kumala

16:30-17:00

COFFEE BREAK

Coffee Break

17:00-18:45

Room 1	Room 2	Room 3	Room 4	Room 5
TD.1 - PT8 (Lagrangian) E. Calzavarini	**TD.2 - BL6 (Boundary Layers)** R. B. Cal	**TD.3 - CT2 (Compressible)** A. Kritsuk	**TD.4 - NNF2 (Non-Newtonian)** H. Xu	**TD.5 - TH1 (Theory)** M. Wilczek
Numerical Investigations Of Colliding Particles In Spatially Decaying Turbulence Christoph Siewert; Rudie Kunnen; Matthias Meinke; Wolfgang Schröder	***Direct Numerical Simulation Of Turbulent Wall Flows At Constant Power Input*** Yosuke Hasegawa; Bettina Frohnapfel; Maurizio Quadrio	***Dsmc Simulation Of Transition And Turbulent Flow In A Lid-driven Cavity At High Mach Number*** Sahadev Pradhan; Viswanathan Kumaran	***Contravariant And Covariant Polymer Dumbbells In Non-affine Viscoelastic Turbulence*** Kiyosi Horiuti; Shohei Takeu	***Finite Reynolds Number Effects On Pressure In Freely Decaying Isotropic Turbulence*** Marcello Meldi; Pierre Sagaut
Dispersion Of Particles From Localized Sources In Turbulence Riccardo Scatamacchia; Luca Biferale; Alessandra Sabina Lanotte	***The Geometry Of The Turbulent-non-turbulent Interface Layer In Boundary Layers*** Guillem Borrell; Jiménez Javier	***Artificial Turbulization Of The Supersonic Boundary Layer By Dielectric Barrier Discharge*** Pavel Polivanov; Andrey Sidorenko; Anatoly Maslov	***Friction Factor For Turbulent Flows Of Herchel-bulkley Fluids In Rough Pipes*** Daniel Cruz; Atila Freire	***The Dynamics Of Pressure In Planar Turbulent Flows: Flow Stability And Modeling*** Aashwin Mishra; Sharath Girimaji
Effective Diffusion And Dispersion Of Inertial Particles In Flowing Fluids Marco Martins Afonso; Andrea Mazzino; Paolo Muratore-Ginanneschi	***Off-wall Boundary Conditions For Bounded Turbulent Flow Simulations*** Ricardo Garcia-Mayoral; Brian Pierce; James Wallace	***Experimental Investigation Of Effect Of Ultrasonically Absorptive Coating Length On Second Mode Disturbances In Hypersonic Boundary Layer*** Sergey Lukashevich; Sergey Morozov; Aleksandr Shiplyuk	***Relevant Terms For Large-eddy Simulations Of Viscoelastic Isotropic Turbulence*** Antonio Mosca; Carlos B. da Silva; Fernando T. Pinho; Pedro Valente	***Prediction Of Low-frequency Trailing Edge Noise Using Rapid Distortion Theory*** Mohammed Afsar; Marvin Goldstein; Stewart Leib
Long Separation Times Between Particles And Limitation Of The Ghost Collision Approximation Michel Voßkuhle; Alain Pumir; Emmanuel Lévêque	***Dns Of Turbulent Flow With Temporal Acceleration*** Yongmann Chung	***Reverse Of Laminar-turbulent Transition In A Supersonic Underexpanded Microjets*** Sergey Mironov; Vladimir Aniskin; Anatoly Maslov; Ivan Tsyryulnikov	***Influence Of A Strongly Shear-thinning Rheology On Nonlinear Waves With A 3-fold Rotational Symmetry In Pipe Flow: Asymptotic Regime*** Emmanuel Plaut; Nicolas Roland; Cherif Nouar	***Comprehensive Realizability Of Pressure Strain Correlation Models*** Sharath Girimaji; Aashwin Mishra
Breakup Of Small Aggregates In Bounded And Unbounded Turbulent Flows Matthäus Bäbler; Luca Biferale; Luca Brandt; Ulrike Feudel; Ksenia Guseva; Alessandra Lanotte; Cristian Marchioli; Eros Pecile; Francesco Picano; Sardin Getano; Alfredo Soldati; Toschi Federico	***On The Effects Of Porous Walls On Transitional And Turbulent Channel Flows*** Maurizio Quadrio; Marco Rosti; Davide Scarselli; Luca Cortelezzi	***Turbulence In A Rotor/stator Cavity In The Vicinity Of The Critical Point Of Sf6*** Gautier Verhille; Cécile Lachize; Patrice Le Gal	***Elastic-turbulence-induced Melting Of A Nonequilirium Vortex Crystal In A Forced Thin Fluid Film*** ANUPAM GUPTA; RAHUL PANDIT	***On Pseudo Self-similar Regimes In Isotropic Turbulence Decay*** Pierre Sagaut; Marcello Meldi
	Velocity Level Crossing Statistics In Wall Bounded Turbulent Flows Sedat Tardu; Frédéric Bauer	***Effect Of Compressibility On The Merging Of Shielded Vortices*** Ravindra Shende; Sameen A.	***On The Peterlin Approximation For Turbulent Flows Of Polymer Solutions*** Luca Biferale; Prasad Perlekar; Federico Toschi; Dario Vincenzi	***What Rdt Tells Us About T/nt Interfaces*** Miguel Teixeira; Carlos Silva
	Extended Theory Of Oil Film Interferometry For Skin Friction Measurement Antonio Segalini; Peter Monkewitz; Jean-Daniel Rüedi			***On The Strength Of The Nonlinearity In Isotropic Turbulence*** Robert Rubinstein; Wouter Bos

Wednesday, 4 September 2013

8:30-9:25

PLENARY SESSION 7

Plenary Session 7 - Roberto Camussi (Room 1)
Application Of Time-frequency Tools In Aeroacoustics

9:30-10:45

WA.1-5

Room 1	Room 2	Room 3	Room 4	Room 5
WA.1 - TC1 (Taylor-Couette) D. Lohse	**WA.2 - STR1 (Stratification)** A. Venaille	**WA.3 - CRYO3 (Cryogenics)** P. Roche	**WA.4 - PSM1 (Passive Scalar & Mixing)** J. Lemay	**WA.5 - ROT3 (Rotation)** C. Cambon
The Basic Physics Of The Linear Transient Growth In Plane Shear Flows George Chagelisvhili; Jan-Niklas Hau; George Khujadze; Martin Oberlack	***Energy Transfer In Stratified Turbulence*** Stefano Musacchio; Guido Boffetta; Paolo Muratore-Ginanneschi	***Interplay Of Laminar And Turbulent Dynamics In Helium Superfluids*** Vladimr B. Eltsov; Samuli Autti; Matti Krusius	***Budgets Of Turbulent Kinetic Energy And Scalar Variance In The Self -similar Region Of A Round Jet*** Jean Lemay; Azemi Benaissa; Alexis Darisse	***Experimental And Numerical Study Of Oscillating Grid Turbulence Subjected To System Rotation*** Yohei Morinishi; Zhixiang Liu; Toshiki Nagao; Shinji Tamano
Turbulent Bursts And Torque Maxima In Taylor-couette Flow Hannes J. Brauckmann; Bruno Eckhardt	***Explicit Algebraic Models For Turbulent Flows With Buoyancy Effects*** Werner Lazeroms; Geert Brethouwer; Stefan Wallin; Arne Johansson	***Energy And Geometry Of A Tangle Of Vortex Filaments*** Lucy Sherwin; Andrew Baggaley; Carlo Barenghi	***Passive Scalar Mixing: Turbulence Versus Chaotic Advection.*** Benjamin Kadoch; Wouter Bos; Kai Schneider	***Experimental Investigation Of Large-scale Non-decaying Rotating Turbulence*** Lian Gan; Yasir B. Baqui; Peter A. Davidson; Per-Aage Krogstad; James R. Dawson
Pockets Of Turbulence In Plane Couette Flow Tobias Kreilos; Bruno Eckhardt; Tobias M Schneider	***Vortex Structures Of 3d Separated Flows Of Stratified Viscous Fluid*** Pavel Matyushin; Valentin Gushchin	***Superfluid Turbulence, Vortex Dynamics, And Universaility In Ultracold Bose Gases*** Markus Karl; Boris Nowak; Thomas Gasenzer	***Turbulence Induced Coarsening Arrest In Spinodal Decomposition*** Federico Toschi; Roberto Benzi; Herman Clercx; David R. Nelson; Prasad Perlekar	***Which Scales Are More Anisotropic In Rotating Turbulence?*** Pierre-Philippe Cortet; Frédéric Moisy
Symmetry Related Slow Processes In Parallel Shear Flows Bruno Eckhardt; Tobias Kreilos	***On The Evolution Of Full-field Stratified Turbulence*** Andrea Maffioli; Peter Davidson; P.K. Yeung	***Internal Structure Of Vortices In Superfluids And Implications For Quantum Turbulence*** Sophie Villerot; Bernard Castaing; Laurent Chevillard	***Experimental And Numerical Study Of Chaotic Mixing In A Curved-square Duct Flow*** CANCELLED Yasutaka Hamamizu; Shinichiro Yanase; Kazunori Nishida; Kyoji Yamamoto	***Energy Transfers In A Forced Homogeneous Turbulence Experiment Under Rotation*** Antoine Campagne; Basile Gallet; Paul Billant ; Frédéric Moisy; Pierre-Philippe Cortet
	Spectral Analysis Of The Transition To Turbulence From A Dipole In Stratified Fluid Jean-Marc Chomaz; Pierre Augier; Paul Billant	***Reconnections Of Quantum Vorices*** Konrad Bajer; Miron Kursa; Tomasz Lipniacki	***Experimental Investigations On Mixing Evaluation In Non-circular Sharp Edge Nozzles*** Giovanni Romano; Adel Hashiehbaf	***The Near Wake Of A Square Cylinder Under The Effect Of Coriolis Forces*** Ignacio Mayo; Filippo Coletti; Tony Arts

10:45-11:15

COFFEE BREAK

Coffee Break

11:15-12:45

WB.1-5

Room 1	Room 2	Room 3	Room 3	Room 5
WB.1 - TC2 (Taylor-Couette) B. Eckhardt	**WB.2 - ENG2 (Engineering)** N. Mazzelier	**WB.3 - JET2 (Jets)** R. Antonia	**WB.4 - CONV5 (Convection)** R. du Puits	**WB.5 - TH2 (Theory)** S. Girimaji
Optimal Taylor-couette Turbulence Chao Sun; Dennis P. M. van Gils; Sander G. Huisman; Siegfried Grossmann; Detlef Lohse	***A K-ε- V2-f Model For Turbulent Flow Of Dilute Polymer Solutions Up To The Maximum Drag Reduction*** Mohammadali Masoudian; Kyoungyoun Kim ; Fernando Tavares de Pinho; Radhakrishna Sureshkumar	***Near Field Round Jet Flow Downstream From An Extended Abrupt Contraction Nozzle*** Annemie Van Hirtum; Xavier Grandchamp	***Turbulent Convection In Bounded Vertical Layers*** Peter Frick; Andrey Teymurazov; Andrey Vasiliev	***On The Role Of Helicity In The Three-dimensional Navier-stokes Equations*** Luca Biferale; Stefano Musacchio; Titi S. Edriss; Federico Toschi
Experiments On The Onset Of Subcritical Turbulence In Shear Flows Kerstin Avila; Paul Steffen; Bjoern Hof CANCELLED	***Characterization Of Wake Dynamics Via Proper Orthogonal Decomposition For Varying Wind Farm Arrangements*** Nicholas Hamilton; Murat Tutkun; Raul Bayoan Cal	***Volumetric Investigation Of Vortex Pairing In A Wall Jet In Air*** David Hess; Christoph Skupsch; Jens Kitzhofer; Christoph Brücker	***Energy Dissipation Rate, Velocity Correlation Function And Structure Functions In Turbulent Rayleigh-Bénard Convection With Polymer Additives*** Ke-Qing Xia; Rui Ni; Xiao-Ming Li; Ping Wei	***Vorticity Statistics And The Time Scales Of Turbulent Strain*** Luca Moriconi; Rodrigo Pereira
Torque Measurements In A Wide Gap Taylor-couette Flow Sebastian Merbold; Christoph Egbers	***Robust Real-time Estimation Of The State Of The Flow Past A Backward-facing Step*** Nicolas Gautier; Jean-Luc Aider	***Experimental And Numerical Study Of The Turbulent/non-turbulent Interface In A Turbulent Round Jet Flow*** Konstantin Kleinheinz; Markus Gampert; Heinz Pitsch; Norbert Peters	***Influence Of The Stratification On The Turbulent Convective Flow In A Tilted Channel*** Éléonore Rusaouën; Xavier Riedinger; Jean-Christophe Tisserand; Fanny Seychelles; Julien Salort; Bernard Castaing; Francesca Chillà	***Instanton Filtering For The Stochastic Burgers Equation*** Tobias Grafke; Rainer Grauer; Tobias Schaefer
Velocity And Front Velocity Measurements In Experimental Plane Couette Flow Marie Couliou; Romain Monchaux	***On The Low-frequency Behaviour Of The Laminar Separation Bubble On A Naca 0012 Near Stall*** Oriol Lehmkuhl; Ivette Rodríguez; Ricard Borrell; Assensi Oliva	***Buoyancy Effects In Turbulent Jet Mixing*** Sergiy Gerashchenko; Kathy Prestridge	***The Geostrophic Regime Of Rotating Rayleigh-bènard Convection*** Robert Ecke; Scott Backhaus	***Functional Renormalization-group Approach To Decaying Turbulence*** Andrei Fedorenko; Pierre Le Doussal; Kay Wiese
On The Discontinuous Transition To Turbulence In Plane Couette Flow Paul Manneville	***Cavity Flows: Change Of Regime In The Ratio Between The Pressure And Kinetic Energy Flows Across The Cavity Mouth.*** Antonella Abbà; Peter Roger Bailey ; Daniela Tordella	***Analysis O F Jet-jet Interaction Of Multiple Impinging Jet Using Dns*** Takahiko KOIDE; Koichi TSUJIMOTO; Toshihiko SHAKOUCHI; Toshitake ANDO	***Mixed Convection In A Rayleigh-Benard Cell With An Imposed Mean Wind*** Andrea Scagliarini; Armann Gylfason; Federico Toschi	***Renormalization Of The Fragmentation Equation: Exact Self-similar Solutions And Turbulent Cascades*** Vladimir Leonidovich Saveliev; Mikhail Arkadievich Gorokhovski
Symmetry Of Vortices In Transition Of Plane Couette Flow At Moderate Reynolds Number Tomoaki Itano; Sotos Generalis; Takahiro Ninomiya; Takeshi Akinaga; Masako Sugihara-Seki	***Experimental Investigation On 3d Lagrangian Coherent Structures In The Left Ventricle*** Maria Grazia Badas; Stefania Espa; Stefania Fortini; Giorgio Querzoli	***Variable-viscosity Mixing In The Very Near Field Of A Round Jet*** Léa Voivenel; Benoît Talbot; Luminita Danaila	***Vortex Identification In Rotating Turbulent Rayleigh–bÉnard Convection Of Water*** Susanne Horn; Olga Shishkina; Claus Wagner	***Energy And Helicity Spectra In The Shell Model With Distributed Helicity Injection*** Alexander Shestakov; Ephim Golbraikh; Rodion Stepanov; Peter Frick

12:45-14:15

LUNCH

Lunch (Lunch Hall)

14:15-15:10

PLENARY SESSION 8

Plenary Session 8 - Arne Johansson (Room 1)
Dns And Modeling Of Structures, Complexities, Fibres And Rotational Effects In Turbulent Channel Flow

15:15-16:30	Room 1	Room 2	Room 3	Room 4	Room 5
	WC.1 - EXP1 (Experiments) G. Bewley	**WC.2 - NUM2 (Numerics)** F. Toschi	**WC.3 - IT5 (Instability & Transition)** P. Manneville	**WC.4 - PSM2 (Passive Scalar & Mixing)** F. Raynal	**C.5 - WT2 (Wave Turbulence)** J. Laurie
	Accuracy Of Wall-shear Stress Measurements Using Micro-pillars Bernardo Nottebrock; Wolfgang Schröder	***Underresolved Turbulence Simulations With Stabilized High-order Discontinuous Galerkin Methods*** Andrea Beck; Gregor Gassner; Claus-Dieter Munz	***Weakly-nonlinear Instability Development In A Sharply Stratified Shear Flow With An Inflection-free Velocity Profile*** Semyon Churilov	***Experimental Scalar Spectra In Chaotic Advection*** Cyril Mauger; Nathanaël Machicoane; Mickaël Bourgoin; Romain Volk; Florence Raynal	***Spatiotemporal Investigation Of Capillary Wave Turbulence: Hypothesis Of Weak Nonlinearity Under Scrutiny*** Michael Berhanu; Eric Falcon
	Experiments With Super-miniature Hot-film Probe For Sub-kolmogorov Resolution In High-Reynolds-number Turbulence Youry Borisenkov; Michael Kholmyansky; Slava Krylov; Alexander Liberzon; Arkady Tsinober	***An Explicit Algebraic Subgrid-scale Scalar Variance Model*** Amin Rasam; Zeinab Pouransari; Luc Vervisch; Arne V. Johansson	***Effects Of Freestream Turbulence On Crossflow Instabiltiy*** Seyed Mohammad Hosseini; Ardeshir Hanifi ; Dan Henningson Moved to session TB.2 - CTL3 Tuesday 12:00 - Room 2	***Scalar Gradient Statistics In Isotropic Turbulence In The Presence Of A Mean Scalar Gradient*** Wouter Bos	***Direct Numerical Simulations Of Capillary Wave Turbulence*** Luc Deike; Daniel Fuster; Michael Berhanu; Eric Falcon
	Measurement Of Fine Scale Structure In Turbulence By Quad-plane Stereoscopic Piv Yoshitsugu Naka; Kenichi Tomita; Masayasu Shimura; Naoya Fukushima; Mamoru Tanahashi; Toshio Miyauchi	***A Mixed Multiscale Dynamic Sgs Model Accounting For The Cross-term*** Olivier Thiry; Grégoire Winckelmans	***Direct Numerical Simulations Of Tilted Rayleigh-taylor Instability*** Daniel Livescu; Tie Wei	***Measurement And Analysis Of Incremental Averages Of Passive Scalar Statistics In Grid Turbulence*** Laurent Mydlarski; Colin Meyer; Luminita Danaila	***Flow Topology In Drift-wave Turbulence*** Diego del-Castillo-Negrete; Benjamin Kadoch; W.J.T. Bos; Kai Schneider
	Using Dns To Compare The Performance Of Virtual Hot-wire Probe Sensor And Array Configurations For Simultaneous Measurement Of The Velocity Vector And Velocity Gradient Tensor Petar Vukoslavčević; James Wallace	***Numerical Simulation Of Turbulent Channel Flow With Synthetic Wall Boundary Conditions*** Berengere Podvin; Yann Fraigneau	***About The Nature Of A Secondary Phenomenon Inside A Cavity Shear Flow*** Christelle Douay; Luc Pastur; François Lusseyran	***Signature Of Salt-induced Diffusion Of Particles In A Turbulent Water Jet*** Nathanaël Machicoane; Cyril Mauger; Romain Volk; Mickaël Bourgoin; Cecile Cottin-Bizonne; Christophe Ybert; Florence Raynal	***Numerical Investigation Of The Role Of Dissipation In Flexural Wave Turbulence: From Experimental Spectra To Kolmogorov-zakharov Scalings*** Benjamin Miquel; Alexandros Alexakis; Nicolas Mordant
	Control Of Turbulence With A High Degree-of-freedom Active Grid Gregory Bewley; Johannes Kassel; Eberhard Bodenschatz	***Large-eddy Simulation Of Turbulent Flows On Composite Multi-resolution Grids By The Lattice Boltzmann Method*** Hatem Touil	***Stability Analyses Of Flow Through An Aneurysm: Steady And Pulsatile Flows*** Shyam Sunder Gopalakrishnan; Benoît Pier; Arie Biesheuvel	***Stochastic Decomposition Of Atmospheric Turbulence*** Alan Morales; Matthias Wächter Joachim Peinke	***New Aspects Of Energy Transfer In Charney-hasegawa-mimawave Turbulence*** Brenda Quinn; Miguel Bustamante; Colm Connaughton
16:30-17:00	COFFEE BREAK				

Coffee Break

	Room 1	Room 2	Room 3	Room 4	Room 5
17:00-17:45	**WD.1 - EXP2 (Experiments)** A. Liberzon	**WD.2 - NUM3 (Numerics)** H. Touil	**WD.3 - IT6 (Instability & Transition)** M. Buffat	**WD.4 - STR2 (Stratification)** P. Augier	**WD.5 - PF4 (Pipe Flows)** B. Hof
	Experimental Measurement Of Turbulence Intensity Of Flow Over Two Rod And Circular Cylinder In Tandem Arrangement Farzad Mir; Amir Bak Khoshnevis; Ehsan Gholipour; Mohammed Rezaeimoghaddam	***Large-eddy Simulations Of Turbulent Flow Around A Wall-mounted Cube Using An Adaptive Mesh Refinement Approach*** Oscar Antepara; Oriol Lehmkuhl; Assensi Oliva; Federico Favre	***Transition To Turbulence In The Rotating-disk Boundary Layer*** Ellinor Appelquist; Philipp Schlatter; Henrik Alfredsson; Rebecca Lingwood	***Growth And Collapse Of A Finite Patch Of Stratified Turbulence*** Zachary Taylor; Alexander Liberzon; Peter Diamessis; Roi Gurka	***The Speed Of Turbulent-laminar Fronts In Pipe Flow*** Dwight Barkley; Marc Avila; Björn Hof **Moved to session SC.3 - PF2 (Sunday 15:30 - Room 3)**
	Reconstruction Of Wavelike Three-dimensional Coherent Structures Through Time-resolved Planar Measurements Jérémy Basley; Luc Pastur; François Lusseyran; Julio Soria	***Blended Scale-separation Models For Large Eddy Simulations*** Roel Verstappen	***What Happens To The Critical Layer When The Transition Inducing Mechanism In The Swirling Flow In An Annulus Shifts From Tollmien-schlichting's To Taylor's*** Venkatesa Iyengar Vasanta Ram; Jeanette Hussong; Nikolaus Jeromin	***Experimental Observation Of Density Fluctuations In A Stably Stratified Turbulent Fluid*** antoine venaille; Louis Gostiaux; Joël Sommeria	***Phase Transition To Sustained Turbulence In Pipe Flow*** Mukund Vasudevan; Marco Vassallo; Björn Hof
	Correlation Between Active Grid Excitation And Generated Wind Field Nico Reinke; Joachim Peinke; Michael Hölling	***Progress On Eddy-viscosity Models For Les: New Differential Operators And Discretization Methods*** F.Xavier Trias; Roel Verstappen; Andrey Gorobets; Assensi Oliva	***Transition Near The Edge Of A Rotating Disk*** Benoît Pier	***Tangling Clustering Instability For Small Particles In Temperature Stratified Turbulence*** Tov Elperin; Nathan Kleeorin; Misha Liberman; Igor Rogachevskii	***Turbulent-spot Development In Constant-mass-flux Channel Flow*** Takahiro Tsukahara; Takahiro Ishida; Yohann Duguet
17:45-18:15	**Closing** (Room 1) D. Lohse				