INTERNATIONAL CONFERENCE ON PROGRESS IN FLUID DYNAMICS AND SIMULATION: CELEBRATING THE 60TH BIRTHDAY ANNIVERSARY OF TONY WEN-HANN SHEU





理論科學研究中心 Center for Advanced Study in Theoretical Sciences

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The Hele-Shaw asymptotics for tumor growth fluidmechanical models

Prof. Benoît Perthame

From puncture to acupuncture: Damaging (or even deadly) puncture to health-preserving puncture Prof. Marc Thiriet

For the abstract of this talk, please <u>click here</u>.

Mast cell-nerve cell interaction at acupoint: Modeling mechanotransduction pathway induced by acupuncture Prof. Wei Yao

For the abstract of this talk, please click here.

Modeling and simulating in acupuncture

Dr. Yannick Deleuze

Solitary wave dynamics and template matching algorithms

Prof. Long Lee

On the unified wave model for smooth progressive waves and peaked/cusped soliton in finite water depth

Prof. Shijun Liao

For the abstract of this talk, please <u>click here</u>.

Simulation of incompressible flow with free surface using the volume preserving level set method Prof. Ching-Hao Yu

A moving particle method for simulating incompressible flow

Prof. Khai Ching Ng

On an effective simulation of ultrasound wave propagation in liver tissue

Dr. Maxim Solovchuk

Injection flow in a heterogeneous porous medium

Prof. Ching-Yao Chen

A conservative discrete ordinate method for solving semiclassical Boltzmann-BGK equation

Prof. Jaw-Yen Yang

Space-time computational FSI techniques

Prof. Tayfun Tezduyar

Space-time interface-tracking with topology change (ST-TC)

Prof. Kenji Takizawa

Direct forcing immersed boundary modeling for mixed heat transfer

Prof. Tzyy-Leng Horng

A perspective of vorticity force at low-speed aerodynamics

Prof. Chien-Cheng Chang

An immersogeometric method for fluid-structure interaction

Prof. Ming-Chen Hsu

A high accuracy compact scheme for computational aeroacoustic problems

Prof. Yogesh G. Bhumkar

Lattice Boltzmann simulations on multi-GPU cluster

Prof. Chao-An Lin

Unstructured finite volume simulations using GPU and Phi coprocessors

Prof. Matthew Smith

Solving Linear Systems on GPU

Prof. Weichung Wang

Surrogate-based modeling and dimension reduction techniques for multi-scale mechanics problems

Prof. Wei Shyy

Time integration for DNS of transitional and turbulent flows: Critical evaluation of an IMEX method

Prof. Tapan K. Sengupta

For the abstract of this talk, please click here.

A temporal multi-scale algorithm for hybrid simulation of gas discharge and gas flow: Validation and applications

Prof. Jong-Shinn Wu

Integrated nano-biomechanics for cellular scale phenomena in blood flow

Prof. Takami Yamaguchi

Multiscale modeling of vascular adaptation

Prof. Marc Garbey

Multiphysics modeling of rocket combustion

Prof. Yen-Sen Chen

Toward heavy truck fuel efficiency using CFD

Prof. Shih-Hsiung Chen

Modeling and simulation of combustion dynamics in liquid-fueled propulsion systems

Prof. Vigor Yang

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Direct modeling for computational fluid dynamics

Prof. Kun Xu

For the abstract of this talk, please click here.

Adaptive CESE method for solving unsteady Euler equations

Prof. Ruey-Jen Yang

For the abstract of this talk, please click here.

On the merging of two colliding droplets with distinct materials

Prof. Kuo-Long Pan

Numerical simulation and analysis of compressible turbulent flows

Prof. Xi-Yun Lu

A WENO derivative constrained 4th order flux reconstruction method

Prof. Feng Xiao

Vortical flow structure in the wake of an estate car

Dr. Phillip Gwo-Yan Huang

For the abstract of this talk, please click here.

On the "Ying" (even) and "Yang" (odd) modes of drop oscillations and its effects on drop dynamics

Prof. An-Bang Wang

A numerical simulation of free-surface turbulence

Prof. Wu-Ting Tsai

For the abstract of this talk, please click here.

Dynamic energy efficiency of heat and of momentum in balanced vortex

Prof. Hung-Chi Kuo