



**Workshop
ZZULI - UNICAM**

Building Research Bridges

March 30 - April 1st 2021

March 30th

<https://unicam.webex.com/meet/emaneuele.tondi>

OPENING DAY

9.00 CHN 15.00
Opening of workshop and welcome address by authorities
Rongjie Huang Rector Zzuli
Claudio Pettinari Rector Unicam

ART, DESIGN AND ARCHITECTURE
Chairmen:
Giuseppe Ciorra
Carlo Vannicola
Bingyu Mu

9.25 CHN 15.25
Introduction by Chair

Invisible interface: Interaction Design for Public Art in the Context of Digital Media
Bingyu Mu
Housing the Human
Giuseppe Ciorra

MATHEMATICS AND INFORMATION TECHNOLOGY

Chairmen:
Renato De Leone
Leonardo Mostarda
Le Jiang
Yan Huang

10.05 CHN 16.05
Introduction by Chair

On the Solutions of Lane Equation in Quaternion Analysis
Le Jiang
Energy-efficient Clustering for IoT Energy Constrained Devices
Leonardo Mostarda
The Threaded Prefetching Technique for Complex Data Accesses
Yan Huang

Break

11.00 CHN 17.00
FOOD, BIOSCIENCES AND BIOENGINEERING

Chairmen:
Elena Vittadini
Gianni Sagratini
Roberto Spurio
Xingli Liu

11.15 CHN 17.15
Introduction by Chair

The Degradation of Alternaria Mycotoxins by Dielectric Barrier Discharge Cold Plasma
Xiaoyuan Wang
Pulses for the Production of Healthy and Sustainable Food
Elena Vittadini

PHYSICS, CHEMISTRY AND MATERIAL SCIENCE AND ENGINEERING

Chairmen:
David Vitali
Alessandro Palmieri
Haiyan Wang
Zhihong Zhang

11.55 CHN 17.55
Introduction by Chair

Laser Induced Functional Polymer Surface for Periodic Structure
Jing Cui
Novel composite materials for antimicrobial applications
Fabio Marchetti
Monolayer NbF₄: a Promising 4d¹-analogue of Cuprates
Yang Yang

12.50 CHN 18.50
Closing of works & Address by authorities

March 31st

<https://unicam.webex.com/meet/carlo.vannicola>

ART, DESIGN AND ARCHITECTURE SESSION

9.00 CHN 15.00
Welcome address by Chairmen:
Giuseppe Ciorra
Carlo Vannicola
Bingyu Mu

9.10 CHN 15.10
Design for Cultural Heritage: New Tools, Practices and Technologies
Carlo Vannicola
9.25 CHN 15.25
Research on Color Identification System and Planning Approach of traditional villages in central China under the background of rural revitalization

Qian Zhang
9.40 CHN 15.40
Fusion and Innovation

Jing Xu
9.55 CHN 15.55
Metropolis

Marco D'Annunziis
10.10 CHN 16.10
Cognitive Load Affects User Preference in Product Design

Ge Chen
10.25 CHN 16.25
The Innovations and Experiments on the Transformation of Clothes Structure from Flat to Three-dimensional and Vice versa
Lei Zhang

10.40 CHN 16.40 Break

10.55 CHN 16.55
Climate

Federica Ottone
11.10 CHN 17.10
Accidental Nature - On the Language Features of Modern Ceramic Art
Lijuan Zhang
11.25 CHN 17.25
A study on the Propagation of Intangible Cultural Heritage Elements in Contemporary Digital Art

Bowen Zhang
11.40 CHN 17.40
Heritage

Enrica Petrucci
11.55 CHN 17.55
Intelligent Clothing Designs For The Elderly

Xiaoyue Cui
12.10 CHN 18.10
Aging Design: The Logical Transformation from Explicit Function to Implicit Perception
Hui Peng

12.25 CHN 18.25 Break

12.40 CHN 18.40
VRgara Experience. 3D Gesture Archive to Promote and Preserve Local Food heritage

Daniele Rossi
12.55 CHN 18.55
The Conversion of Traditional Designing Language in Modern Residential Architecture

Xinyi Dong
13.10 CHN 19.10
Reconstructing and Communicating the Corporate Heritage. Historical Research and Design Strategies in the Digital Context
Carlo Vinti

13.25 CHN 19.25 Closing

March 31st

<https://unicam.webex.com/meet/roberto.spurio>

FOOD, BIOSCIENCES AND BIOENGINEERING SESSION

9.00 CHN 15.00
Welcome address by Chairmen:
Elena Vittadini
Gianni Sagratini
Roberto Spurio
Xingli Liu

9.10 CHN 15.10
Gut-brain Axis as a Therapeutic Target in the Prevention and Treatment of Alzheimer's Disease
Anna Maria Eleuteri

9.25 CHN 15.25
Lipid Remodelling is a Widespread Strategy In Marine Heterotrophic Bacteria Response to Phosphate Starvation
Tao Wei
9.40 CHN 15.40
Influence of Different Hydrocolloids on Dough Thermo-Mechanical Properties and in Vitro Starch Digestibility of Gluten-Free Steamed Bread based on Potato Flour

Xingli Liu
9.55 CHN 15.55
Nutrigenomics of Food Bioactives: How Food Regulates Gene Expression

Rosita Gabbianelli
10.10 CHN 16.10
Tea Polyphenols Incorporated into Alginate-Based Edible Coating for Quality Maintenance of Chinese Winter Jujube under Ambient Temperature

Lihua Zhang
10.25 CHN 16.25
Linseed Oil Improves Hepatic Insulin Resistance in Obese Mice through Modulating Mitochondrial Quality Control

Xiao Yu
10.40 CHN 16.40
Plasticity of Human Gut Microbiota in Environmental/Dietary Changes due to Mobility from China to Italy, with Functional Investigations
Cristina Miceli

10.55 CHN 16.55 Break

11.15 CHN 17.15
Application of Bio-Microcapsule Immobilization Technology for Lactic Acid Bacteria Fermentation to Produce Extracellular Polysaccharide
Jing Tao
11.30 CHN 17.30
The Structure resolution of Gaussia Luciferase Using Nuclear Magnetic Resonance (NMR) Spectroscopy

Nan Wu
11.45 CHN 17.45
Biogenic Amines as Quality Index for the Evaluation of Food Shelf Life
Gianni Sagratini
12.00 CHN 18.00
Development of neuroprotective nutraceuticals: A new frontier to improve human health
Roberto Ciccooppo

12.15 CHN 18.15 Closing

March 31st

<https://unicam.webex.com/meet/renato.deleone>

MATHEMATICS AND INFORMATION TECHNOLOGY SESSION

9.00 CHN 15.00
Welcome address by Chairmen:
Renato De Leone
Leonardo Mostarda
Le Jiang
Yan Huang

9.10 CHN 15.10
3D modeling and fluid simulation in porous and fractured media: Potential issues for sustainability and energy challenges.
Miller Zambrano

9.25 CHN 15.25
Recent Progress on Blow up Criteria in Lorentz Spaces to the Navier-Stokes equations
Yanqing Wang
9.40 CHN 15.40
Dynamical Analysis on some Biochemical Reaction-diffusion Models

Ying Xu
9.55 CHN 15.55
Monitoring Spatio-Temporal Properties of Cyber Physical Systems
Michele Loreti
10.10 CHN 16.10
Algebro-geometric Integration of a Modified Shallow Wave Hierarchy

Guoliang He
10.25 CHN 16.25
Higher-order interaction solutions and rogue wave pairs for the coupled Lakshmanan-Porsezian-Daniel equations

Tao Xu
10.40 CHN 16.40
Mathematical Models for Fluid Flows in Environmental and Industrial Applications
Pierluigi Maponi

10.55 CHN 16.55 Break

11.15 CHN 17.15
Coupling of Boundary Integral Equation and Finite Element Methods for Transmission Problems in Acoustics
Hongrui Geng
11.30 CHN 17.30
What Does Your Smile Mean? Jointly Detecting Multi-Modal Sarcasm and Sentiment Using Quantum Probability

Yazhou Zhang
11.45 CHN 17.45
Dynamics of Real Interval Maps Generated by Erasing Substitutions: an Example of Sharply Chaotic Behaviour
Alessandro Della Corte
12.00 CHN 18.00
The Research of Intrusion Detection Model in Dynamic Environment of Network

Ling Zhang
12.15 CHN 18.15
Off-chain Execution of IoT Smart Contracts
Diletta Romana Cacciagnano

12.30 CHN 18.30 Closing

March 31st

<https://unicam.webex.com/meet/alessandro.palmieri>

PHYSICS, CHEMISTRY AND MATERIAL SCIENCE AND ENGINEERING SESSION

9.00 CHN 15.00
Welcome address by Chairmen:
Alessandro Palmieri
Haiyan Wang
Zhihong Zhang

9.10 CHN 15.10
Pyrazolate-based MOFs with Gas Sorption Properties and Catalytic Activity
Corrado Di Nicola

9.25 CHN 15.25
Investigation on Antibacterial Mechanism of PolyMOFs
Zhihong Zhang
9.40 CHN 15.40
Electron Storage Behavior of Molecules and Molecule-integrated Systems

Heng Wang
9.55 CHN 15.55
Materials and Interfaces for Next-generation Batteries
Francesco Nobili
10.10 CHN 16.10
Thermodynamic Analysis of Gas Separation Using ILs/DESs

Yingying Zhang
10.25 CHN 16.25
Two Dimensional Materials for Sodium Storage
Peiyuan Wang

10.40 CHN 16.40 Break

10.55 CHN 16.55
Recycling and New Efficient Syntheses of Polymers for Valuable Applications
Serena Gabrielli
11.10 CHN 17.10
The strain in 2D hybrid organic-inorganic perovskites

Haiyan Wang
11.25 CHN 17.25
Phase Transitions of Carbon Tetrachloride under Static and Dynamic Pressures
Chaosheng Yuan
11.40 CHN 17.40
Mixed Hexacyano Metallates: Versatile Compounds

Silvia Zamponi
11.55 CHN 17.55
Effect of Microstructure on its Properties of VO₂

Dewei Liu
12.10 CHN 18.10
Structure and Properties of Ionic Liquid under High Pressure
Haining Li

12.25 CHN 18.25 Break

12.40 CHN 18.40
Determination of the Electronic and Optical Properties of Few-layer CrCl₃ 2D Material
Roberto Gunnella
12.55 CHN 18.55
Study on the Tuning of the Magnetic Ordering and Magneto Electric Coupling Effect in Quasi-one-dimensional Frustrated Magnet Ca₃CoMnO₆

Cui Shang
13.10 CHN 19.10
Tunable Electronic and Optical Properties of Two-Dimensional Van der Waals Heterostructures toward Optoelectronic Applications
Jimin Shang
13.25 CHN 19.25
High-efficiency, High-power, L-shaped Cavity Optically Pumped
Lijie Geng

13.40 CHN 19.40 Closing

April 1st

<https://unicam.webex.com/meet/david.vitali>

**WORKSHOP
PHYSICS, CHEMISTRY AND MATERIAL SCIENCE AND ENGINEERING SESSION**

9.00 CHN 15.00
Welcome address by Chairmen:
David Vitali
Haiyan Wang

9.10 CHN 15.10
Structure and Phase Transitions under Pressure Probed by X-Ray Absorption Spectroscopy
Andrea Di Cicco
9.25 CHN 15.25
Performance Improvement of BOTDR with wavelength-division-multiplexing and Biorthogonal code

Yunqi Hao
9.40 CHN 15.40
Application of Electrothermal Microelectromechanical System Mirror
Donglin Wang
9.55 CHN 15.55
Thermal Noise as a Limit to the Sensitivity of Gravitational Wave Interferometers

Flavio Travasso
10.10 CHN 16.10
Study on the Generation Method of Near-Infrared Vortex Beams Based on Geometric Phase Metasurfaces
Xiaodong Zhang

10.25 CHN 16.25 Break

10.40 CHN 16.40
White Light LED of Perovskite Materials
Sen Li
10.55 CHN 16.55
Introduction of Different Types of Agro-Industrial Waste into Synthesized Biopolymer Matrices
Carlo Santulli
11.10 CHN 17.10
Generation of High-efficiency, Tunable Terahertz-wave Parametric Laser Sources

Ruiliang Zhang
11.25 CHN 17.25
Temporal Properties of Raman Scattering in Fibers
Nannan Liu
11.40 CHN 17.40
Insight into the Lithiation Mechanisms in Li-Ion Anode Materials by X-Ray Absorption Spectroscopy
Angela Trapananti

11.55 CHN 17.55 Break

12.10 CHN 18.10
The Generation of High-power Vector Optical Field
Pingping Li
12.25 CHN 18.25
Holographic Display Method with Large Field-of-view Based on Holographic Functional Scree
Sujuan Liu
12.40 CHN 18.40
Composite Materials under Impact Loading: Numerical and Experimental Analysis
Simonetta Boria
12.55 CHN 18.55
Bidirectional Dark Soliton Mode-locked Fiber Laser for Gyroscopic Sensing Application
Wenyan Zhang
13.10 CHN 19.10
Fabrication of Amorphous 2D MoO₃ Functional Materials for Photothermal Conversion
Xuzhe Wang
13.25 CHN 19.25
Synthesis and structural characterization of crystalline and glassy materials potentially useful for REE scavenging from wastes
Gabriele Giuli

13.25 CHN 19.25 Closing

To know, discuss and compare the research carried out at the two universities, for the benefit of undergraduate and graduate students participating in the joint programs and representing the builders of the Research Bridges between the two universities and, more generally, between Italy and China

Registration available to the following website
<https://convegni.unicam.it/Unicam-Zzuli/home>