

## Aug. 23 List of Posters

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10949	C001	David Matheo Vargas Huertas, Javier Esteban Martinez Caldas, Juan Jose Camargo Carbonell, Juan Steban Garzón Trujillo, María Isabel Romero Rodríguez, Jorge Eliécer Carillo Velá squez	RICE HUSK IN THE HYDROCARBONS INDUSTRY
10950	C002	Masaya Kobayashi, Takahiko Kurahashi, Toshiaki Kenchi, Toshihiko Eto	Parameter identification analysis for incompressible viscous flow with interface
10951	C003	Sung Ho Kang, Kiwan Jeon, Sang-Hoon Kang, Sang-Hwy Lee	Multi stage deep reinforcement learning for Automatic three-dimensional cephalometric landmark detection
10957	C004	Kazuki Yamamoto, Takahiko Kurahashi, Yuki Murakami, Fujio Ikeda and Ikuo Ihara	Identification analysis of defect topologies by self-attention-based machine learning (Effect of number of training data on identification accuracy)
10959	C005	Towa Koike, Takahiko Kurahashi, Masayuki Kishida, Yuki Murakami and Fujio Ikeda	Identification analysis of defect topologies using level-set-based topology optimization with weighted sensitivity
10961	C006	Aymen Hadji, Fatma Zohra Nouri	Mathematical Modeling for a Bioglass Bioactivity Degradation
10966	C007	Sho IKEDA, Toshiaki ITOH	Simulation of Synchronization with Neuronal Population Firing Model
10969	C008	Feeroz R. Yusoph, Angelyn R. Lao	Epidemiological Modeling of Health Information Dynamics on Twitter
10971	C009	Paul K. Yu, Llewelyn S. Moron-Espiritu, Angelyn R. Lao	Systems biology approach to understanding azole resistance mechanisms in <i>Candida albicans</i>
10972	C010	Christoforos Kassianides, Hadrien Oliveri, Alain Goriely	A multiscale model for axon durotaxis
10980	C011	Abdulaziz Alsenafi, Mohammed Ferdows	Similarity and Finite Difference Solution on Biomagnetic Flow and Heat Transfer of Blood-Fe <sub>3</sub> O <sub>4</sub> through a Thin Needle
10982	C012	Ibtissem Hadji, Fatma-Z Nouri	Mathematical and Numerical Study of a Stem Cell Problem
10983	C013	Adam Furman	Compartment Models for Ideas on Social Media Networks
11204	C014	Julia Makarova, Ricardo Muñ oz, Oscar Herreras, Valeri A. Makarov	Analysis of the fractal dimension of multidimensional data: The case of local field potentials
11207	C015	Monalisa Anand, P. Danumjaya, P. Raja Sekhara Rao	A nonlinear mathematical model on the Covid-19 transmission pattern among diabetic and non-diabetic population
11213	C016	Xinyi Deng, Joshua Glaser, Loren Frank, Scott Linderman	Clusterless Inference of Compression of Spatial Representation in Hippocampal Replay
11261	C017	Giovana Ortigoza Alvarez	Shortest path problem for recruiting personnel

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11287	C018	Hiromi Seno, Reina Uchioke, Emmanuel J. Dansu	A population dynamics model for the information spread under the effect of social response
11391	C019	Sanchez-Bravo Ivete	Industrial Problem Solving Workshop Mexico. 16th years improving math collaboration between companies and academia.
11431	C020	Kyle Nguyen, Erica M. Rutter, Kevin Flores	Estimation of Parameter Distributions for Reaction-Diffusion Equations with Competition using Aggregate Spatiotemporal Data
11553	C021	Dongju Lim, Yun Min Song, Jae Kyoung Kim	Mood Prediction for Bipolar Disorder Patient with Sleep Pattern Information
11594	C022	Jui-Hung Hsieh, Kuan-Yi Kuo, and Wei-Ting Chen	High-Efficiency 3D Video Coding Based On Machine Learning
11764	C023	Chengkai Yang	Representation Learning for Continuous Single-cell Biology with Graph Neural Networks
11901	C024	Yoshinori Katanaya,Rijyo Yamakawa,Hirokazu Komatsu,Hiroshi Yokota	Convergence rates of consensus in multi-agent systems with communication delays
11943	C025	Ani Jain, Parimita Roy	A MATHEMATICAL MODEL FOR DECIPHERING THE IMPACT OF OBESITY ON CANCER
11965	C026	Ognyan Simeonov	The Influence of Human Behavior in COVID-19 Modeling
12015	C027	Alonso Ogueda-Oliva, Padmanabhan Seshaiyer	Application of machine learning to predict dynamics of epidemiological models that incorporate human behavior
12200	C028	Anton Phipps	Diatom Identification in Microscopy Videos Using Computer Vision Techniques
12227	C029	Chen J, Min W	Deciphering tissue-specific gene-drug patterns by sparse tensor partial least squares method
12300	C030	Saranchai Sinlapasorn, Benjawan Rodjanadid , Jessada Tanthanuch, Bura Sindhupakorn	Features Engineering and Machine Learning Methods for the Prediction of the Patients' Postoperative WOMAC Score After Total Knee Replacement
12354	C031	Yin-Ting Yeh	A Portable Platform for Label-free Virus Enrichment and Fast/Accurate Virus Surveillance using Raman Spectroscopy
12356	C032	Dayton Syme, Yun Lu, Anna G. Sorace, and Nicholas G. Cogan	Modeling CD4+ and CD8+ Cell Activity to Combination Immunotherapy in Mice with Triple Negative Breast Cancer
12412	C033	Michal Mankowski, Khalid AlMeshari	Simulating Saudi Kidney Exchange Program
12503	C034	Alex Cunillera, Harm H. Jonker, Gerben M. Scheepmaker, Wilbert H. T. J. Bogers, Rob M. P. Goverde	How bifurcations of dynamical systems are helping train drivers to save energy in the Netherlands
12556	C035	Jitendra Kumar	Micro-Macro Modelling of Particulate Systems
12651	C036	M. Calvo-Schwarzwalder, A. Cabrera-Codony, A. Valverde, M. Agualeles, T.G. Myers	Development of a mathematical model for adsorption of multiple components from a polluted fluid

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12813	C038	Yanping Ma, Gail Tang	Designing good teaching materials to train future applied mathematicians
12828	C039	Juhi Jaiswal, Thomas Berger, Nutan Kumar Tomar	Partial impulse observability of linear descriptor systems
12858	C040	Jin-Wei Liang	Inertia-Based Natural Frequency Re-Assignment of a Real Reciprocating Hydrogen Compressor Used in Refineries
12970	C041	Nor Farah Wahidah Binti Nor Khalid, Mohd Almie Bin Alias	Effect of population distribution on critical time of reaction-diffusion systems
13086	C042	Yasunari Zempo, Nobuhiko Akino, Satoru S. Kano	Maximum entropy method for efficient spectrum analysis
13162	C043	Pearson W. Miller, Daniel Fortunato, Matteo Novaga, Stanislav Y Shvartsman, Cyrill B Muratov	Generation and motion of interfaces in a mass-conserving reaction-diffusion system
13193	C044	Daniele Di Lorenzo, Victor Champaney, Angelo Pasquale, Francisco Chinesta	Models correction based on sparse identification and data assimilation
13215	C045	Gong CHEN, Yvon MADAY	Parameterization of Force Field in Molecular Simulation by Machine Learning
13272	C087	Sergio Torregrosa, Victor Champaney, Amine Ammar, Vincent Herbert, Francisco Chinesta	Hybrid Twins based on Optimal Transport
13290	C046	Jussi Keppo, Nizar Touzi, Ruiting Zuo	Dynamic Contracting in Asset Management under Investor-Partner-Manager Relationship
13332	C047	Zhiqiong FU, Hiromi SENO	An epidemic dynamics model with a limited capacity of isolation for a reinfectious disease
13347	C048	Jianxiong Sun, Harry Zheng	Multi-stage Stochastic control
13354	C049	Ying XIE, Hiromi SENO	Social response could cause recurring epidemic outbreaks: A population dynamics model
13361	C050	Victor SCHNEIDER, Hiromi SENO	Population dynamics model on the persistence of native species in fragmented habitat under an alien species invasion
13366	C051	Yunil Roh, Jong Hyuk Byun, Il Hyo Jung	Mathematical Modeling of 3D Tumor Spheroid Growth Inhibition for Anticancer Drugs
13385	C052	Honghui Zhang, Zhuan Shen, Lin Du	Dynamical modelling of Alzheimer's disease considered with astrocytes
13393	C053	Junhyeok Choi, Bongsoo Jang	Analyzing the structure of cyclical competition using deep learning method
13398	C054	Ángeles Carmona, Andrés M. Encinas, María José Jiménez	Group Inverses everywhere!
13446	C055	Vaibhava Srivastava, Eric M. Takyi, Rana D. Parshad	The effect of "fear" on two species competition

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13462	C057	María José Jiménez Jiménez, Ángeles Carmona, Andrés M. Encinas	Improving EIT discrete techniques
13488	C058	Hsin-Yi Kuo, Po-Chun Huang	Free Vibration of Multiferroic Laminates with Interfacial Imperfections and Nonlocal Effect
13490	C059	Kana Yoshido, Honda Naoki	Adaptive discrimination between harmful and harmless antigens in the immune system by predictive coding
13497	C060	Soma Hirooka, Yudai Sugiyama, Takahiko Kurahashi	Shape optimization of an isolated body in incompressible viscous flow for minimization of drag force based on Deep Q-Network and the FEM
13498	C061	Mizuki Ikarashi, Masayuki Kishida, Takahiko Kurahashi	Application of density-based topology optimization for maximally stiff structure problem using two-phase materials
13499	C062	Hideto Oda, Takahiko Kurahashi	Texture shape optimization for minimization of friction coefficient based on the modified accelerated gradient method
13500	C063	Kousuke Shimizu, Masayuki Kishida, Takahiko Kurahashi	Level-set-based topology optimization for bi-linear type elasto-plastic problems
13512	C064	Jesse Holt, Jinghao Chen, Elizabeth Evans, John Lowengrub, Medha Pathak	PIEZO1 regulates leader cell formation and cellular coordination during collective cell migration
13549	C065	Misao Fukuda	Mathematical representation of bias and nudge centered on intangible goods by quantum information theory
13558	C066	Jyh-Cheng Jeng, Wen-Jeng Chen	Data-based Optimal Tuning of I-PD Controllers for Time-Delayed Unstable Processes
13568	C086	Nguyen Ngo Cong Thanh	Impact of Barren Plateaus Mitigation Strategy on the Performance of Quantum Neural Network
13577	C067	Yue Zhang, Peng Wang	Uncertainty quantification on process variability for magnetic tunnel junction (MTJ)/ CMOS hybrid logic circuits
13578	C088	Eunseo Choi, Hyojung Lee	Impact of viral load on COVID-19 transmission dynamics considering the variants
13579	C068	Hyeonjeong Ahn, Giphil Cho, JeongRye Park, Yongin Choi, Hyojung Lee	Estimating the early detection of COVID-19 outbreak using machine learning
13591	C069	Geunsoo Jang	Early Detection of Norovirus Outbreaks Using Machine Learning
13593	C070	Heli Virtanen	Teaching computational inverse problems: what can ChatGPT do?
13597	C071	Yoshifumi Asakura, Yoshihiro Morishita, Takayuki Suzuki	Mathematical modeling of chromatin dynamics in Hox-mediated animal body development
13601	C072	Genrev Josiah Villamin, Yvette Fajardo-Lim	Inheritance Pattern of Crosses of Yellow Mice, a Multiplayer Game
13604	C073	Olive R. Cawiding, Se Ho Park, Aurelio A. de los Reyes V, Jae Kyoung Kim	Investigating the impact of weather variables to dengue incidence in the Philippines

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13607	C075	Lorenz Richter, Julius Berner	An optimal control perspective on diffusion-based generative modeling
13611	C076	Jana Tarhini, Quang Huy Tran, Guillaume Enchéry, Sébastien Boyaval	A fast CO <sub>2</sub> storage simulator using reduced bases
13621	C077	Shintaro Kondo, Masaki Mori, Takamichi Sushida	Spatiotemporal integral kernel of a hierarchical differential equation model in vision and afterimage phenomena
13636	C078	Shuhei, Takaya	Deflated CRS and BiCRSTAB methods with preserved duality
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13649	C080	Tomoko Adachi, Kazuomi Oishi	Application of Threshold Scheme to Anonymous Public-key Certificate
13661	C081	Lee Ho Bin	LONG-TIME BEHAVIOR OF COMPOSITE WAVE OF PLANAR VISCOUS SHOCKS FOR THE 3D BAROTROPIC NAVIER-STOKES EQUATIONS
13662	C082	Dongyan Sui, Chun Guan, Zhongxue Gan, Wei Lin, Siyang Leng	Tuning Convergence Rate via Non-Bayesian Social Learning: A Trade-Off between Internal Belief and External Information
13663	C083	Emmet Lawless, Paolo Guasoni	Investment and consumption under stochastic risk premia
13670	C084	Jongmin Lee, Eunok Jung	User-friendly Dashboard for Estimating the Risk of Emerging Infectious Diseases using a Delayed Stochastic Model and Exploring Optimal Response Strategies
13687	C085	Hae Soo Jung, Seon Ki Park	Appropriate Combining Methods for East Asian Aerosol Optical Thickness Data