PROGRAM NAFEMS Iberia Conference: Innovative Design and Simulation Technologies
Universidad Politécnica de Madrid (UPM), Madrid 14 November 2024

11:30	Registration
SESSION 1: Room A-201 Torres Quevedo (2nd floor) **Chair: Eduardo Oslé Dorremochea**	
12:00	Welcome (NAFEMS Iberia)
12:05	Presentation by NAFEMS International
12:15	Application of machine learning for reduce modelling. Calibration of a 1D ventilation model of a complex road tunnel network. *Fabian de Kluijver & Alberto Lopez de Arriba (JVVA)*
12:40	How can classic engineering methods be combined with machine learning algorithms to reduce cabin noise? *Annika Schmidt (Technical University of Applied Sciences Wildau)*
13:05	Questions & Answers (additional)
13:15	SPONSOR presentation: Dassault Systèmes
13:20	Snack lunch break (Exhibition area)
SESSION 2: Room A-201 Torres Quevedo (2nd floor) **Chair: Juncal Guerrero Muñoz** ***(in parallel with SESSION 3, please note timing)***	
14:00	Analysis of Insertion and Extraction Processes. *Javier Reboul (Principia)*
14:25	A cost-effective Cold Roll-Forming FE model for industrial applications. *Timothy Senart (CRM Group)*
14:50	Simulación CFD-DEM en el diseño de gasificadores de biomasa de lecho fluidizado. *Pedro Gómez Molina & Álvaro José Martínez González (ICEMM)*
15:15	Body in White stiffness prediction and Optimization. *Eva Ioannou, Dimitrios Drougkas (Beta CAE Systems SA) & Fabiola Cavaliere (Centro Técnico de SEAT S.A.)*
15:40	Questions & Answers (additional)
15:50	Coffee break (Exhibition area)
SESSION 3: Room A-102 Emilio Herrera (1st floor) **Chair: Rocío Núñez** ***(in parallel with SESSION 2, please note timing)***	
14:00	Thermodynamics-informed Neural Networks in Physical Simulation. *Alberto Badias (Universidad Politécnica de Madrid)*
14:25	Development of a reduced FE model for failure prediction of recycled composite plies structures. *Miguel Herraez (TecnoDigital School)*
14:50	Intelligence Morphing: Using CAD morphing and machine learning to predict CAE results *Alberto Perez, Victor Jaouen (Simulexa) & Vidya Shankar (Detroit Engineered Products (DEP))*
15:15	Optimización multiobjetivo mediante algoritmos genéticos. *Nicolas Escribano, Gabriel Beltrán Lostal, José Manuel Bielsa Gimeno & Begoña García Arregui (Instituto Tecnológico de Aragón (ITA))*
15:40	Questions & Answers (additional)
15:50	Coffee break (Exhibition area)
SESSION 4: Room A-201 Torres Quevedo (2nd floor) **Chair: Marcos Chimeno Manguán**	
16:20	SPONSOR presentation: Beta CAE
16:25	Structural Topology Optimization as a Convolutional Neural Network. *Raul Llamas (Airbus)*
16:50	The Atmospheric Boundary Layer. Discussion and methodology proposal for proper development of numerical wind tunnels. *Francisco Hurtado (Cade Solutiones de Ingenieria S.L.)*
17:15	Questions & Answers (additional)
17:25	Conclusing remarks (NAFEMS Iberia)
17:30	Close