

Monday 31 March					
TRACK 1 DEVONSHIRE		TRACK 2 CAVENDISH		TRACK 3 DERBY	
12:00	13:00	Registration (all day)			
13:00	14:00	Light lunch / refreshments			
14:00	15:30	Tutorial A TUTORIAL ON KRIGING-BASED STOCHASTIC SIMULATION OPTIMIZATION Sasan Amini and Inneke Van Nieuwenhuysse	Tutorial BUILDING HEALTHCARE DISCRETE-EVENT SIMULATION MODELS IN FREE AND OPEN SOURCE SOFTWARE: AN INTRODUCTORY TUTORIAL Thomas Monks, Alison Harper, Amy Heather, Andrew Mayne and Navonil Mustafee	Africa Focus 1 Hybrid Session Session Chair: Mehdi Souier USUTHU WATER MANAGEMENT AREA, SOUTH AFRICA Janez Susnik, Blaine Haupt, Daniela Kristensen, Gareth Simpson, Antonio Trabucco and Roberto Roson In-person: EVALUATING POOLED PROCUREMENT AND INVENTORY MANAGEMENT FOR ESSENTIAL MEDICINES IN NIGERIA Viraj Joshi, Mikaella Polyviou, John Fowler, Eugene Schneller and Adegoke Oke	
15:30	16:00	Refreshment Break			
16:00	17:30	Tutorial WANT TO BUILD A MOONBASE? THE SIMULATION EXPLORATION EXPERIENCE (SEE) Maziar Ghorbani, Simon J E Taylor, Nura Tijjani Abubakar, Hridyanshu Aatreya, Damon Curry and Anastasia Anagnostou	Methods Session Chair: Oliver Rose DISCRETE-EVENT SIMULATION MODEL OF TURNAROUND OPERATIONS TO EVALUATE AIRLINE SCHEDULE ROBUSTNESS Elisa Guardo-Martinez, Stephan Onggo, Martin Kunc, Maurizio Tomasella and Silvia Padron ISOCHRONIC MAPS FOR MILITARY GROUND MOVEMENT: INFORMATION INFERENCE BY INTERSECTION Alexander Roman and Oliver Rose NETLOGOPY: UNLOCKING ADVANCED SIMULATION AND INTEGRATION FOR NETLOGO USING PYTHON Nourddine Bouaziz, Belgacem Bettayeb, M'Hammed Sahnoun and Adnan Yassine Optional dinner/drinks at Imperial Hotel (at own cost)	Conceptual modelling Session Chair: John Salt CHIP AWAY EVERYTHING THAT DOESN'T LOOK LIKE AN ELEPHANT John Salt DEVELOPING A CONCEPTUAL MODEL TO EVALUATE SHELF-LIFE EXTENSION AS A RESILIENT STRATEGY IN HUMAN MILK BANKS Marta Staff, Navonil Mustafee and Natalie Shenker DEVELOPING HYBRID KIDNEY CARE MODELS WITH FACILITATED MODELLING Stacey Croft, Lucy Morgan, Antuela Tako, Yun He, Sally Thompson and Mark Lambie	
Tuesday 1 April					
TRACK 1 DEVONSHIRE		TRACK 2 CAVENDISH		TRACK 3 DERBY	
08:30	09:00	Registration (all day)			
09:00	09:15	Welcome address Nav Mustafee, Tom Monks, Martino Luis and Alison Harper Keynote Address: Mamadou Kaba Traore			
09:15	10:00	MULTI-SCALE AND MULTI-PERSPECTIVE DIGITAL TWIN: EXPERIENCE WITH AN URBAN LIVING LAB			
10:00	11:00	Sponsors and Poster Session			
11:00	11:30	Refreshment Break			
11:30	13:00	Supply chain Session Chair: Cansu Kandemir SUPPLY CHAIN DEVELOPMENT FOR CIRCULARITY IN AEROSPACE: AIRCRAFT SEAT CASE STUDY Marco Franchino, Christopher Haynes and Cansu Kandemir LOGISTICS NETWORK DESIGN FOR A SUSTAINABLE BLOOD SUPPLY CHAIN UNDER DISASTERS USING A SIMULATION APPROACH Lama Soliman Khaled, Ahmad Attar, Martino Luis and Baris Yuca DOES CUSTOMER ORDER MATTER? EXPLORE THE DYNAMICS OF LOST-SALES REMANUFACTURING SYSTEM UNDER AR(1) DEMAND Yan Lu and Junyi Lin	Healthcare 1 Session Chair: Siôn Cave OPERATIONAL VALIDATION USING SIMULATION MODELS DESIGNED AND CREATED WITH DIFFERENT PARADIGMS Bożena Mielczarek LESSONS LEARNED FROM THE DESIGN AND DELIVERY OF A NATIONAL SYSTEM DYNAMICS TRAINING PROGRAMME TO THE NATIONAL HEALTH SERVICE IN ENGLAND Siôn Cave, Vanessa Perez Perez, Stephen Curram and Emma Woodham	Africa Focus 2 Hybrid Session Session Chair: Nav Mustafee Virtual presentation: SIMULATION MODELING FOR SURGERY ROOM SCHEDULING PROBLEM Ibrahim Kridi, Tawfiq Tabouche and Imène Ait Abderrahim Virtual presentation: OPTIMIZING WASTE TREATMENT CENTER LOCATIONS: A MATHEMATICAL MODELING AND SIMULATION APPROACH Younes Abderrahim, Salah Eddine Bellal and M'Hammed Sahnoun In-person: AFROS: AFRICAN FEDERATION OF OPERATIONAL RESEARCH SOCIETIES: AN OPPORTUNITY TO BUILD BRIDGES TO OPERATIONS RESEARCH AND SIMULATION DEVELOPMENT IN AFRICA Mehdi Souier and Safa Bhar Layeb	
13:00	14:00	Lunch			
14:00	15:30	Manufacturing Session Chair: Martino Luis A DES-BASED ONLINE DIGITAL TWIN FRAMEWORK FOR FESTO'S CYBER-PHYSICAL SYSTEM: INDUSTRY 4.0 Muhammad Alfas, Yanyan Tian, Ahmad Attar, Martino Luis and Voicu Ion Sucala FROM BLUE-SKY CONCEPT TO INDUSTRIAL DEPLOYMENT: HOW OCADO TECHNOLOGY USED SIMULATION TO GUIDE THE DEVELOPMENT OF THE WORLD'S MOST ADVANCED GROCERY PICKING ROBOT Robert Backhouse, Sean Schrauben and Gareth Siret DISCRETE EVENT SIMULATION WITH REINFORCEMENT LEARNING FOR ADVANCED MANUFACTURING DECISION-MAKING Cansu Kandemir and Marco Franchino	Healthcare 2 Session Chair: Laura Boyle STRATEGIC WORKFORCE MODELLING AND ANALYSIS AT NHS WALES: TOWARDS A STRATEGIC DIGITAL TWIN OF THE WELSH HEALTHCARE WORKFORCE Siôn Cave and Ryan Cunningham EVALUATING THE IMPACT OF STAFFING RECOMMENDATIONS IN MATERNITY UNITS IN FRANCE Louis Niffoi, Ouaid Joui, Marija Jankovic, Pierre-François Ceccaldi and Guillaume Lamé SIMULATION MODELLING OF DELAYED DISCHARGE FROM HOSPITAL Ranga Abeysooriya, Nirmani Amarasinghe, Laura Boyle, Christine Currie and Carlos Lamas-Fernandez	Optimisation Session Chair: Ahmad Attar MULTI-OBJECTIVE AIRPORT SIMULATION-BASED OPTIMISATION USING DES AND RESPONSE SURFACE METAMODELS Ahmad Attar, Mahdi Babae, Sadigh Raissi and Majid Nojavan GENERATORS FOR LARGE-SCALE STOCHASTIC SIMULATION-OPTIMIZATION EXPERIMENTS Renee Oswald and David Eckman DO WE NEED SIMULATION OPTIMISATION FOR QUEUEING ALLOCATION PROBLEMS? Luke Rhodes-Leader and Yu-Ting Lin	
15:30	16:00	Refreshment Break			
16:00	17:30	Methods Session Chair: Varun Ramamohan SIMULATION METAMODELLING VIA LOCAL LINEAR INTERPOLATION Varun Ramamohan, Deep Bansal, Harsh Vardhan Singh and Yash Sarju Shah ONTOLOGICAL GRAPH BASED MODELLING AND SIMULATION Steven Jones, Ben Lomax Thorpe and César Mardomingo Alonso TOWARDS CONTAINER-BASED SIMULATION: A CONCEPT FOR A DISTRIBUTED AND SCALABLE SIMULATION FRAMEWORK Daniel Seufferth, Falk Stefan Pappert and Oliver Rose	Healthcare 3 Session Chair: Christos Vasilakis MODELLING LONG-TERM CHANGES IN POPULATION HEALTH STATE AND ASSOCIATED HEALTHCARE RESOURCE REQUIREMENTS Zehra Onen-Dumlü, Luke Shaw, Richard Wood and Christos Vasilakis DISCRETE EVENT SIMULATION TO UNDERSTAND AMBULANCE PERFORMANCE AND IMPROVEMENT STRATEGIES Martina Bargeman Fonseca and Jonathan Pearson NAVIGATING HOSPITAL OPERATIONS THROUGH SIMULATION: A STUDY OF URBAN FLOODING DISASTERS AND PHYSICAL DAMAGE IMPACT Sorour Farahi, Steffen Bayer, Sally Brailsford and Stephan Onggo	Agent-based modelling Session Chair: Avi Roy Chowdhury THE SIMPLEST, BUT NO SIMPLER, AGENT-BASED MODEL Charles Macal HIERARCHICAL HYBRID SIMULATION MODELING OF BACTERIAL DISEASE INFECTION Avi Roy Chowdhury, Jayendran Venkateswaran and Om Damani APPLICATION OF HYBRID AGENT-BASED MODELING AND SYSTEM DYNAMICS SIMULATION: COLLABORATION TO IMPROVE SUPPLY CHAIN RESILIENCE Davoud Hosseinezhad, Cathal Heavey and Footroogh Goodarzi	
17:30	18:30	Journal of Simulation EAB meeting			
19:00	19:30	Drinks Reception			
19:30	22:00	Gala Dinner- at University of Exeter			
Wednesday 2 April					
TRACK 1 DEVONSHIRE		TRACK 2 CAVENDISH		TRACK 3 DERBY	
08:30	08:45	Registration (all day)			
08:45	09:30	Keynote Address: Christine Currie DIGITAL TWIN SIMULATION FOR OPERATIONAL DECISION MAKING			
09:30	11:00	Health and care Session Chair: Durk-Jouke van der Zee DEVELOPING, VERIFYING AND VALIDATING A SIMULATION PLATFORM TO IMPROVE RESOURCE PLANNING FOR THE NSPCC HELPLINE Jess Cole and Stephen Pollard MODELLING FOR SIMULATION MULTI-USE - TOWARDS A FRAMEWORK FOR COST-EFFECTIVENESS ANALYSES OF REPERFUSION TREATMENTS FOR ACUTE STROKE Chi Nguyen, Durk-Jouke van der Zee, Maarten M.H. Lahr, Maarten Uyttenboogaart and Erik Buskens A CONCEPTUAL FRAMEWORK FOR PROMOTING SUSTAINABILITY IN SIMULATION OF HOSPITAL PHARMACY ASEPTIC UNITS Fatemeh Alidoost, Navonil Mustafee, Thomas Monks, Alison Harper and Alice Harrison	ARSINOE: Simulation for climate resilience Session Chair: Albert Chen TOWARDS A DIGITAL TWIN FOR EMERGENCY RESPONSE: A HYBRID SIMULATION FOR MULTI-SECTORAL RESOURCE ALLOCATION Otto Chen, Navonil Mustafee, Qian Li, Barry Evans, Mehdi Khoury, Lydia Vamvakieridou-Lyroudia, Albert Chen, Stobodan Djordjevic and Dragan Savic CREATING AND OPERATING A SIMULATION-BASED DIGITAL TWIN SERVICE FOR HYDROLOGIC FLOOD Gareth Lewis, Mehdi Khoury, Qian Li, Barry Evans, Albert Chen, Lydia Vamvakieridou-Lyroudia, Nav Mustafee, Stobodan Djordjevic and Dragan Savic ENHANCING RESILIENCE OF INTERDEPENDENT INFRASTRUCTURE NETWORKS THROUGH A CRITICALITY RANKING APPROACH Georgios Alexandros Chatzistefanou, Albert Chen, Stobodan Djordjevic, Lydia Vamvakieridou-Lyroudia and Dragan Savic	Africa Focus 3 Hybrid Session Session Chair: Mamadou Traore Virtual presentation: EVALUATING PRODUCTION EFFICIENCY IN AN ALGERIAN PLASTIC PACKAGING COMPANY USING ARENA SIMULATION Sara Fatima Zohra Megaiz, Fouad Maliki, Mehdi Souier and Mohammed Dahane In-person: IMPROVING DIABETES TREATMENT OUTCOMES: AN AGENT-BASED MODEL OF PATIENTS' SELF-MANAGEMENT BEHAVIOURS AND TREATMENT OUTCOMES IN GHANA Eunice Twumwaa Tagoe, Itamar Megiddo and Robert Van Der Meer Virtual presentation: SOLVING A REAL COMPLEX SCHEDULING PROBLEM WITH A SIMULATION-BASED OPTIMIZATION METHOD Chakib Medjkane, Yasmine Rihane and Nacira Chikhi	
11:00	11:30	Refreshment Break			
11:30	12:30	PANEL: The Practice of M&S Research and the Challenges and Opportunities for International Collaborations Nav Mustafee (Chair), Masoud Fakhimi, Anastasia Anagnostou, Tillal Eldabi, John Fowler, Varun Ramamohan, Oliver Rose, Mehdi Sourier, Mamadou Traore, and Jayendran Venkateswaran			
12:30	13:30	Lunch			
13:30	14:00	ORS SimSIG			