### Workshop Program

**Wednesday 6th of June 2018**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>09:00-9:45</td>
<td>Registration and Coffee</td>
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<tr>
<td>09:45-10:00</td>
<td>Welcome note <em>(Abdel Salhi, <a href="mailto:as@essex.ac.uk">as@essex.ac.uk</a>, Tel: +01206  873022, Mob: 07763835433)</em></td>
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<tr>
<td>10:00-10:30</td>
<td>Invited talk: <strong>Professor Eric S. Fraga</strong> <em>(University College London)</em> Literate programming and reproducible research</td>
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<td>10:30-10:55</td>
<td><strong>Ola L. Idris et al.</strong> <em>(University of Greenwich)</em> Food Safety Systems for Identifying Critical Limits at Critical Control Points in Food Manufacturing: On Reducing Risk of Contaminant in Food Products</td>
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<td>10:55-11:20</td>
<td><strong>Rudy Kusdiantara</strong> <em>(University of Essex)</em> Homoclinic Snaking of Discrete Solitons with Saturable Optical Cavities</td>
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<td>11:20-11:45</td>
<td><strong>Adam Woodhouse</strong> <em>(University of Essex)</em> Error Modelling in Origami Constructions</td>
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<td>11:45-12:10</td>
<td><strong>Miguel Pineda</strong> and <strong>Michail Stamatakis</strong> <em>(University College London)</em> On the Stochastic Modelling of Surface Reactions Through Reflected Chemical Langevin Equations</td>
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<td>12:10-12:25</td>
<td><strong>Rahmi Rustin</strong> and <strong>Hadi Susanto</strong> <em>(Uni. of Essex, Universitas Indonesia)</em> Analysis of Discrete Systems via Variational Method</td>
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<td>12:25-12:45</td>
<td><strong>Yuslenita Muda et al.</strong> <em>(University of Essex, Institut Teknologi Bandung)</em> Justification of the Rotating Wave Approximation in Damped, Driven Weakly Coupled Oscillators</td>
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<td>12:45-13:45</td>
<td>Lunch break</td>
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<tr>
<td>14:00-14:30</td>
<td>Invited talk: <strong>Professor Choi-Hong Lai</strong> <em>(University of Greenwich)</em> A Generalised Defect Correction Method and its Applications in Option Pricing</td>
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<td>14:30-14:55</td>
<td><strong>Andrew Jupe</strong> <em>(University of Buckingham)</em> The Radon Transform: Tomography and Image Analysis</td>
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Coffee break

Session iii  Chair: Professor Choi-Hong Lai  
15:35-16:00 Invited talk: **Professor Sabah Jassim** (University of Buckingham)  
Emergence of Topological Data Analysis in Machine Learning  
16:00-16:25 **Dr Mohamed Mehbali** (University of London South Bank)  
Solving the Solid Assignment Problem  
16:25-16:50 **Chris Taylor** (University of Essex)  
The Mathematics of Pareto Rankings and Tournament Selection  
16:50-17:10 **Ansam Al-Sabti** and **Sabah Jassim** (University of Buckingham)  
Informative Visualisation of Biological Networks in high throughput Systems Biology Investigations

Dinner

Thursday 7th of June  
EBS 2.45, Wivenhoe Park, Colchester CO4 3SQ, University of Essex

09:00-9:30 Coffee

Session iv  Chair: **Professor Sabah Jassim**  
09:30-10:00 Invited talk: **Dr Niaz Ahmed Wassan** (KBS, University of Kent)  
A metaheuristic Optimization approach for solving a real-life Gas Delivery Problem  
10:00-10:25 **Dr Xinan Yang** (University of Essex)  
An Approximate Dynamic Programming Approach to Attended Home Delivery Management  
10:25-10:50 **Hajem A. Daham** (University of Essex)  
A Heuristic Decomposition based on Column Generation Approach for Combining Orders in Inland Transportation of Containers

Comfort Break

Session v  Chair: **Dr Daan van den Berg**  
11:00-11:25 Invited talk: **Dr Alexei Vernitski** (University of Essex)  
A new data compression method (yes-no-yes Bloom filters) and ways of optimising its performance  
11:25-11:40 **Dr Irem B. Selamoglu** and **Abdel Salhi** (Universities of Essex)  
Hybridising Strip Algorithms and the 2-Opt Rule for Graph-based Optimisation Problems  
11:40-12:00 **Romi Geleijn et al.** (University of Amsterdam, Netherland)  
The Plant Propagation Algorithm and the University Course Timetabling Problem  
12:00-12:20 **Reitze Jansen et al.** (University of Amsterdam, Netherland)  
Plant Propagation as a Metaheuristic for an Optimal VLSI-Router  
12:20-12:40 **Markus Pfundstein et al.** (University of Amsterdam, Netherland)  
Strawberries and Fireworks
Lunch Break

Session vi  
Chair: Dr Niaz Ahmed Wassan  
14:00-14:30 Invited talk: Dr Vanni Noferini (University of Essex)  
Don't walk back in anger  
14:30-14:55 Pedro I. O. Filho et al. (University College London)  
Latin Hypercube Sampling and Regression Trees Applied to Process Scale-up under Uncertainty  
14:55-15:20 Ahmed K. Al-Jaberi et al. (University of Buckingham)  
Inpainting Large Missing Regions Based on Seam-Carving

Coffee Break

Session vii  
Chair: Dr Xinan Yang  
15:35-16:00 Al-Razaz, A. et al. (University of Greenwich)  
A Novel, Robust and Adaptive Model for predicting Oral Drug Absorption  
16:00-16:15 Andrew Lewis (Simulsys Ltd)  
Robotic Process Automation: An Introduction  
16:15-16:40 Dr Salma A. S. Alarefi and Stewart Walker (University of Essex)  
Modelling of Hydropower Generator Characteristic Impedance  
16:40-17:00 Dr Sahar Ahmadzadeh Ghahnaviehei (University of Essex)  
Demand Response Management and Real Time Pricing Issues in Smart Grids

EGL’2019 Announcement and Close of EGL’2018