**DAY 1: ONTARIO-QUÉBEC Statistics and Control Meeting (June 1, 2021)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Speaker** | **University** | **Title** |
| **9:00-9:25** | Zaid Marfatia | Queen's University | Data-Driven Natural Gas Compression Performance Model |
| **9:25-9:50** | Giverny Robert | Université de Sherbrooke | Using Multiblock Partial Least-Squares to Compare the Impact of NIR Pre-processing Methods |
| **9:50-10:15** | David Linan-Romero | University of Waterloo | Optimal Design of a Reactive Distillation Column using a Multiscale Rated-based model |
| **10:15-10:35** | **Break**  |
| **10:35-11:00** | Debanjan Ghosh | McMaster University | Hybrid Modeling: Development and Application |
| **11:00-11:25** | Seyedabbas Alavi | Queen's University | Adaptive Nonlinear Control of Generalized Hamiltonian Systems with Unstructured Component |
| **11:25-11:50** | Andrea Chia | Université Laval | Design of Observers for the Primary Drying in Lyophilization |
| **11:50-13:00** | **Break**  |
| **13:00-13:25** | Jelil Raufu | Laurentian University | Advanced Process Control for the Production of Specialty Nickel Powder Products |
| **13:25-13:50** | Huiyi Cao | McMaster University | A Novel Framework for Bounding Nonlinear Dynamic Systems |
| **13:50-14:15** | Kaveh Abdi | Queen’s University | Obtaining Estimates of Measurement Variances for Use in EVM Parameter Estimation |
| **14:15-14:35** | **Break** |
| **14:35-15:00** | Alex Thivierge | Université Laval | Comparing Multi-objective Optimization Approaches to Calibrate a First Principles Model |
| **15:00-15:25** | Ruonan Li | McMaster University | Optimal Integration of Energy Systems for Residential Buildings, Commercial Buildings, and Light Industries |
| **15:25-15:50** | Rafael David de Oliveira | University of Toronto | Nonlinear Programming Reformulation of Dynamic Flux Balance Analysis Models |

**DAY 2: ONTARIO-QUÉBEC Statistics and Control Meeting (June 2, 2021)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Speaker** | **University** | **Title** |
| **9:00-9:25** | Cecilia Rodrigues | Université Laval | Inline Acoustic Monitoring of Pharmaceutical Tablet Coating Processes – a Preliminary Feasibility Study (Not recorded) |
| **9:25-9:50** | Xin Shen  | University of Waterloo | Interval Observers based on Dynamic Metabolic Flux Models |
| **9:50-10:15** | Mina Naeini | McMaster University | SOFC Manufacturers Hate This: One Weird Trick Will Quadruple its Lifetime |
| **10:15-10:35** | **Break**  |
| **10:35-11:00** | Edgar Pérez | Université Laval | Integrating Online Mineral Liberation Data into Process Control and Optimisation Systems for Grinding-Separation Plants |
| **11:00-11:25** | Lloyd MacKinnon | McMaster University | Robust Multi-Scenario Dynamic Real-Time Optimization with Embedded Closed-Loop Model Predictive Control |
| **11:25-11:50** | Mohammad Jahvani | Queen’s University | Distributed Computation of Least-Squares Solution to Linear Algebraic Equations Over Directed Graphs (Not recorded) |