



# **INTERNATIONAL SEMINARS "OPTIMIZATION AND APPLICATIONS"**

---

18 feb- 20 feb 2019

\*Seminars will be given in English in STEM  
(Postgraduate Building) Auditorium of ESPOL



**FCNM**  
Facultad de Ciencias Naturales  
y Matemáticas



## HONFENG LIANG

Ph.D. in Computer Science  
*McMaster University, Ontario, Canadá*

### INVITED SPEAKER

Hongfeng has a PhD in Computer Science and is currently a Post-doc at McMaster University, where he works on Optimization in Supply Chain Management. His specialties include Assemble-to-Order Systems, Inventory Management, and Optimal Routing Problems.



## JOE GUAN

Ph.D. in Software Engineering (c)  
*McMaster University, Ontario, Canadá*

### INVITED SPEAKER

Joe is completing his PhD in Software Engineering at McMaster University specializing in Integer Programming. He has lectured several undergraduate courses including Operations Research, Linear Optimization, and Parallel Computing. He brings a combination of theoretical knowledge and industry experience obtained from working at startups and internships at software companies, including Microsoft, Appnovation, and Scotiabank.



**FCNM**  
Facultad de Ciencias Naturales  
y Matemáticas



### **MICHAEL LIUT**

Ph.D. Computer Science (c)  
*McMaster University, Ontario, Canadá*

#### **INVITED SPEAKER**

Michael is currently pursuing his PhD in Computer Science at McMaster University. His research focus is Stringology and Combinatorial Optimization. Michael is also a lecturer at the University of Toronto teaching a wide variety of computer science undergraduate courses including Programming Languages, Data Structures and Algorithms, Databases, and Compilers.



### **CARLOS SUÁREZ**

Ph.D. Computer Science (c)  
*McMaster University, Ontario, Canadá*

#### **INVITED SPEAKER**

Carlos is currently pursuing his PhD in Computer Science at McMaster University. His research focus is linear and nonlinear optimization, integer programming and deep learning.



**18 FEB**

## Optimization and Applications in Supply Chain

14H00 – 15H00: **“Introduction to Optimization”** speaker Joe Guan, Ph.D. (c)

15H10 – 16H10: **“Optimization in Supply Chain Management”**, speaker Hongfeng Liang, Ph.D.

**19 FEB**

## Optimization Problems

10H00 – 11H00: **“Computing Lyndon Array”** speaker Michael Liut, Ph.D. (c)

11H10 – 12H10: **“Analyzing worst case scenarios for pivot-based optimization algorithms”**  
speaker Carlos Suárez, Ph.D. (c)

12H10 – 14H30: Lunch

14H30 – 15H30: **“Distances between Vertices of Lattice Polytopes”** speaker Joe Guan, Ph.D. (c)

15H40 – 16H40: **“On Component Commonality for Period Review of Assemble to Order Systems”** speaker Hongfeng Liang, Ph.D.

**20 FEB**

## Discuss how to expand the role of these fields in several potential high-impact application areas.

11H00 – 12H00: **“Q&A Panel for Graduate/Undergraduate students”** speakers:  
Joe Guan, Ph.D. (c), Michael Liut, Ph.D. (c), Hongfeng Liang, Ph.D., and Carlos Suárez, Ph.D. (c)

12H00 – 14H30: Lunch

## Workshop Effective Teaching and Internships in large tech companies

14H30 – 15H30: **“Effective Teaching - How to create accessible content, communicate effectively and properly assess students”** speaker Michael Liut, Ph.D. (c)

15H30 – 16H30: **“Internships in large tech companies and his experiences at Microsoft”**  
speaker Joe Guan, Ph.D. (c)





# FCNM

Facultad de Ciencias Naturales  
y Matemáticas

[www.fcnm.espol.edu.ec](http://www.fcnm.espol.edu.ec)



FCNM Espol



@fcnmspol



@fcnmspol