

## Invited Speakers and Workshop Leaders

Amar Aïssani, USTHB, Algiers  
Kamel Barkaoui, CNAM, Paris  
Bernd Heidergott, Vrij Amsterdam University  
Nadjib Badache, Cerist, Algiers  
Françoise Simonot-Lion, Loria, Nancy  
Natacha Djellab, University of Annaba  
Laszlos Lakatos, Budapest University  
Gerard Reiner, University of Neuchâtel  
Abdellah Boukerram, University of Setif  
Sebastian Games Obrador, University of the Balearic Islands  
Malika Boukala-Ioualalen, USTHB, Algiers  
Catalina Llado, University of the Balearic Islands  
Mohamed Escheikh, ENIT, Tunis  
Mahmoud Boufaïda, University of Constantine  
Ramon Puigjaner, University of the Balearic Islands

## Important Dates :

Deadline for participation: March 15, 2011  
Workshop: April 10 and 11, 2011.

## Sponsors:

Different scientific institutions, organizations and socio-economic regional and national industrial companies.

## Web Sites:

<http://www.univ-bejaia.dz>  
<http://www.lamos.org>.

## Contacts:

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*LAMOS*  
Laboratory of Modeling  
and Optimization of Systems

Department of Operational  
Research

## International Workshop



## Performance Evaluation and Quality of Service



April 10 – 11, 2011 Bejaïa, Algeria

## Presentation

Computer systems and communication networks (Internet, mobile networks, ad hoc networks, sensor networks,...) have recently witnessed their fastest growth period ever in history. Their evolution allows implementation of parallel and distributed architectures increasingly sophisticated, incorporating both distributed processing and exchange of information between these treatments. These networks are increasingly complex, performance modelling and evaluation will play a crucial part in their design process to ensure their successful deployment and exploitation in practice.

For over twenty years, the LAMOS laboratory is interested in this issue. From 1988, the dependability was addressed in the National Conference MFSI (Modèles de Fiabilité et Sciences de l'Ingénieur, Béjaïa – March 1988). Thereafter, other topics, specific to the computer systems and telecommunication networks, were integrated into the program of the International Conferences MOAD (Méthodes et Outils d'Aide à la Décision, especially those of Béjaïa in 1992 and 2007).

## Objectives

This workshop aims to bring together experts in the field and young researchers involved in performance optimization of these systems and networks to share and exchange their experiences, discuss challenges, and report state-of-the-art and in-progress research on some aspects of these systems and networks with a specific emphasis on their performance evaluation .

Locally, the workshop will help to refine the consistency of the Master project "Fiabilité et Evaluation des Performances des Réseaux" of the operational research department, especially after creating the cooperation project Algeria-Spain A/020297/08.

## Topics

*Algorithms and protocols of the network layer in the mobile ad hoc and sensor networks (proactive, reactive and hybrid) : Performance and quality of service and/or conservation of energy*

- Protocols of linear routing (data-centric)
- Protocols of hierarchical routing
- Protocols of geographical routing (localization)
- Protocols based on the negotiation

*Mechanisms and Protocols of the Mac layer in the wireless networks (fixed, mobiles, ad hoc, and sensors): Performance and quality of service*

- Protocols of communication in wireless networks with quality of service
- Protocols of communication in mobile ad hoc networks with quality of service
- Design of Mac layer in wireless sensor networks

*Management of information in systems and networks (distributed systems, Internet, ad hoc networks, sensor networks, etc.)*

- Caches management
- Algorithms for inter-caches cooperation
- Management of the data consistency
- Load balancing
- Traffic Models

*Stochastic Models in the performance evaluation of systems*

- Markov chains and queueing networks
- Stochastic Petri networks
- Large deviations for stochastic processes
- Discrete events simulation: methods and tools
- Comparison of performance models

## Honorary Chairs

Pr Djoudi Merabet, Rector of the University of Béjaïa  
Pr Moussa Kerkar, Dean of the Faculty of Exacts Sciences

## Organizing Committee

Dr. Louiza Bouallouche – Medjkoune (President), Dr. Khelfaoui Youcef (Vice-President), Mr. Fouzi Semchedine, Dr. Redouane Laggoune, Mr. Nourredine Khimoum, Mr. Kamel Kabyl, Melle. Nadjet Benhamida, Mme. Samira Yessad, Mr. Mohamed Toumi, Melle. Samra Boulefkhar, Melle. Nadjet Rebouh, Mr. Ali Larbi, Melle. Nadjette Khoualene, Melle. Zahia Azizou, Melle. Lina Bachiri, Mr. Mouloud Atmani, Mme. Karima Adel, Mr. Mourad Amad, Mr. Nadir Bouchama, Mr. Abdelhak Goutal, Mr. Omar Hamdouni.

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