30th International Conference on Application and Theory of Petri Nets and Other Models of Concurrency

Paris, 22-26 June, 2009
http://petrinet2009.lip6.fr

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Deadline (title + abstract): January 5, 2009
Deadline (paper): January 10, 2009
Notification: March 1, 2009
Camera ready version due: April 1, 2009

Last Minute Information

Last Minute Information
PNSE
KEYNOTE CANCELLATION
KEYNOTE MODIFICATION
June 23, 2009
2009
June 23, 2009
A. Giua, S. Haddad, M. Silva
In honor of prof. Laura Recalde (1971-2008)

Petri Nets Tutorial

Continuous Petri Nets: Expressivity, Analysis and Control of a Class of Hybrid Systems

In honor of prof. Laura Recalde

A. Giua, S. Haddad & M. Silva

June 23, 2009

Sponsored by:

A satellite event of
Petri Nets'2009
June 22-26, 2009
Paris - France

PROF. LAURA RECALDE, died on 27th December 2008.

- Associate Professor of **Systems Engineering and Automatic Control** at the University of Zaragoza
- Taught courses as ***System Theory***, ***Control Systems of Chemical Processes***, and ***Discrete Event Systems***.
- Served six times as a PC member of the **International Conference on Application and Theory of Petri Nets**
- Since January 2006 was an Associate Editor of the **IEEE Trans. on Automation Science and Engineering.**
- Her research was focused on the modeling of DESs, and techniques for their **structural analysis and synthesis**.
- **An outstanding professional and a remarkable person.**
- We will never forget her insatiable curiosity, moderation, endearing closeness and bewitching smile, so frequent, sincere and contagious. **She will always be alive among us.**

In Memoriam of prof. Laura Recalde

1. A satellite event of ICAT Petri Nets'09, Paris.
   Tutorial: ***Continuous Petri Nets: Expressivity, Analysis and Control***

   A. Giua, S. Haddad & M. Silva
2. A special session in the

   IEEE Int. Conf. On AUTOMATION SICENCE & ENGINEERING, Bangalore, August, 2009

   S. Reveliotis, A. Giua & M. Silva
3. Opening and *In Memoriam* session:

   IFAC Int. Conf. On Analysis and Design of Hybrid Systems, Zaragoza, September, 2009

   The Organization Committee

INTERNATIONAL FEDERATION OF AUTOMATIC CONTROL

3rd IFAC Conference on Analysis and Design of Hybrid Systems

ADHS'09

Zaragoza, Spain — September 16-18, 2009

Organization Committe co-Chair

Opening & In Memoriam session

Continuous Petri Nets: Expressivity, Analysis and Control

- **14h00 to 14h45 / Manuel Silva:** *Continuous Petri Nets: On fluidification and basic properties*
- **14h45 to 15h30 / Serge Haddad :** *On the computational power of Timed Differentiable Petri Nets*
- **16h00 to 16h45 / Manuel Silva:** *Observability, Steady-state analysis and parametric optimization of Continuous PNs under infinite servers semantics*
- **16h45 to 17h30 / Alessandro Giua:** *Fault diagnosis and control of Continuous Petri Nets under infinite servers semantics*

Paris / June 23, 2009

CONTINUOUS PETRI NET MODELS: ON FLUIDIFICATION AND BASIC PROPERTIES

Manuel Silva*

Instituto de Investigación en Ingeniería de Aragón (I3A)
Universidad de Zaragoza
SPAIN

* Join work in Zaragoza with Laura Recalde, Jorge Júlvez, Cristian Mahulea and Renato Vázquez, and many other colleagues in different research centers

On the Computational Power of Time Differential Petri Nets

Serge Haddad
LSV, ENS Cachan, CNRS, INRIA Saclay

joint work with Laura Recalde and Manuel Silva
(FORMATS'06, ATVA'07)

Plan

1. Motivation
2. Definition and illustration
3. A first simulation
4. Managing robustness and boundedness requirements
5. TDPNs and TCPNs
6. Conclusions and perspectives

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6. Conclusions and perspectives
Tutorial Petri Nets 2009 23/06/2009
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Paris / June 23, 2009

CONTINUOUS PETRI NET MODELS UNDER INFINITE SERVERS SEMANTICS: *Observability, parametric optimization and other topics*

Manuel Silva*

Instituto de Investigación en Ingeniería de Aragón (I3A)
Universidad de Zaragoza
SPAIN

* Join work in Zaragoza with **Laura Recalde**, Jorge Júlvez, Cristian Mahulea and Renato Vázquez, and many other colleagues in different research centers

Thank you

Control of Continuous Petri Nets under infinite servers semantics

Alessandro Giua

DIEE, University of Cagliari, Italy

ICATP'09 Tutorial on Continuous Petri Nets:
Expressivity, Analysis and Control of a Class of Hybrid Systems
June 23, 2009

Control of Continuous Petri Nets
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A. Giua
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June 23, 2009
A. Giua (U. of Cagliari)
Control of ContPNs
ICATP'09 Tutorial
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Thankyou

Difficulties with behaviours are rooted in the intrincate interleaving of cooperation & competition relationships