



DX04 TECHNICAL PROGRAM



TUESDAY, 22 - AFTERNOON

18 :30- Welcome reception at *Cellier des Vignerons*

WEDNESDAY, 23 - MORNING

8 :15-8 :45 Registration

8 :45-9 :00 Opening

9:00-10:00 INVITED TALK

CHEM : Advanced Decision Support System for Chemical/Petrochemical Processes

Sylvie Cauvin

BREAK (30 MN)

10 :30-12 :30 SESSION 1 (CHAIR : J. DE KLEER)

The Role of OBDDs in Controlling the Complexity of Model Based Diagnosis

G. Torta, P. Torasso

Diagnosis as Semiring-based Constraint Optimization

M.F. Sachenbacher, B. Williams

Determination of Possible Minimal Conflict Sets using Components Custers and Gröebner Bases

R. Ceballos, M.T. Gomez, R.M. Gasca, S. Pozo

Soundly Managing Uncertain Decisions in Diagnostic Analyses

S. Ploix, S. Touaf

LUNCH

WEDNESDAY, 23 - AFTERNOON

14 :00 -15 :30 SESSION 2.1 (CHAIR : P. DAGUE)

Deviation Models Revisited

P. Struss

Model Synthesis for Model-based Fault Analysis

C. Picardi, L. Console, D. Theseider Dupré

Abstracting Continuous System Behaviors into Timed Automata: Application to Diagnosis of an Anaerobic Digestion Process

A. Hélias, J.P. Steyer, F. Guerrin

BREAK (15 MN)

15 :45 -16 :45 SESSION 2.2 (CHAIR : Y. PENCOLÉ)

Chronicles Construction Starting from the Fault Model of the System to Diagnose

B. Guerraz, C. Dousson

Distributed Fault Detection With Delays Consideration

A. Boufaied, A. Subias, M. Combacau

BREAK (15 MN)

17 :00 -18 :45 WEDNESDAY POSTER SESSION (CHAIR : R. MILNE)

An Model Integrated Computing Tool Suite for Fault-Adaptive Control

G. Biswas, E.J. Manders, J. Ramirez, J. Wu

Applying Domain Splitting to Behavior Prediction in Model-Based Diagnosis

R. Lunde

Using Discrete Invariants for Fault Detection of Hybrid Systems

G. Lichtenberg, J. Luetzenberg

Model-based Monitoring of Component-based Software Systems

I. Grosclaude

Towards a Model for Automated Fault Localization in VHDL Designs: Exploring Counterexamples-Traces Using a Model-Based Diagnosis Approach

B. Peischl, F. Wotawa

Building Hybrid Rover Models: Lessons Learned

T.K. Willeke, R. Dearden

Diagnosability Analysis of Distributed Discrete-event Systems

Y. Pencolé

Sensor Placement Optimisation using Genetic Algorithms

S. Spanache, T. Escobet, L. Travé-Massuyès

A propositional root antecedent ITMS

G. Wu, G.M Coghill

A Probabilistic-based Algorithm to Diagnose Complex Electronic Systems

M.A. Maalej, V. Delcroix, S. Piechowiak

THURSDAY, 24 - MORNING

8 :00 -10 :00 SESSION 3 (CHAIR : M.-O. CORDIER)

A Model of Component Consistency in Distributed Diagnosis

R. Su, W.M. Wonham



DX04 TECHNICAL PROGRAM (...)



Compilation and Reuse of Knowledge in Diagnosis of Discrete-event Systems

G. Lamperti, M. Zanella

Extending Decentralized Discrete-event Approach to Diagnose Reconfigurable Systems

A. Grastien, M.O. Cordier, C. Largouët

Identifying Model-Based Reconfiguration Goals through Functional Deficiencies

E. Bézazéra, L. Travé-Massuyès

BREAK (30 MN)

10 :30 -12 :00 SESSION 4 (CHAIR : M. TATAR)

Approximate Modeling for Debugging of Program Loops

W. Mayer, M. Stumptner

Introducing Alias Information into Model-Based Debugging

D. Köb, F. Wotawa

System Diagnosis using Hybrid Failure Propagation Graphs

S. Abdelwahed, G. Karsai, G. Biswas

BUFFET LUNCH

THURSDAY, 24 - AFTERNOON

SOCIAL EVENT AND WORKSHOP DINNER – DEPARTURE AT 12:30.

FRIDAY, 25 - MORNING

8 :30 -10 :00 SESSION 5.1 (CHAIR : J. LUNZE)

A transfer Function Approach to Fault Diagnosis for Linear Systems: Inversion and Low-pass Filters

R. Marquez, A. Rios-Bolivar, E Teles

Fault Diagnosis of Closed Loop Linear Systems with Parametric Uncertainties

C. Join, M. Fliess, H. Sira-Ramirez

Data Validation of Uncertain Dynamic Systems

M. Alhaj Dibo, D. Maquin, J. Ragot

BREAK (15MN)

10 :15 -11 :15 SESSION 5.2 (CHAIR : M. HOFBAUR)

Combining Particle Filters and Consistency based Approaches for Monitoring and Diagnosis of Stochastic Hybrid Systems

S. Narasimhan, R. Dearden, E. Bézazéra

Diagnosing a Team of Agents: Scaling-Up

M. Kalech, G.A. Kaminka

BREAK (15 MN)

11 :30-12 :30 INVITED TALK

Case-based Reasoning in diagnostic problem solving — Alternative or complementary to MBR?

Pietro Torasso

LUNCH

FRIDAY, 25 - AFTERNOON

14 :00-14 :45 **Business Meeting**

14 :45-16 :45 FRIDAY POSTER SESSION (CHAIR : P. STRUSS)

Diagnosis of Discrete-Event Systems using Binary Decision Diagrams

A. Schumann, Y. Pencolé, S.M. Thiebaux

An Improved Algorithm for Hybrid Diagnosis of Complex Systems

G. Biswas, S. Gupta, J. Ramirez

Dynamic Value-Based Diagnosis System for Assembler Programs

L. Lin, Y. Jiang, Z. Fan, C. Zang

Constraint Databases Technology for Polynomial Models Diagnosis

T. Gomez Lopez, R. Ceballos, R. M. Gasca

Model-based Failure Modes and Effects Analysis of Software

N.A. Snooke

On the Integration of Fault Detection and Isolation in Model-based Fault Diagnosis

V. Puig, J. Quevedo, T. Escobet, B. Pulido

Hierarchical Distributed Diagnosis under Global Consistency

R. Su, W.M. Wonham

Matching the Requirements in Model-Based Fault Diagnosis

A. Rakar, D. Juricic

Reconfigurable Fault Tolerant Control for Linear Stochastic Systems subject to Sequential Jumps

J.Y. Keller

BREAK (30 MN)

17 :00 **Cité Guided Tour**