5th International Conference on Control and Fault-Tolerant Systems, SysTol'21
_____

September 29th, 30th and October 1st, 2021 – Saint-Raphaël, France
http://www.systol.org/systol21

Chairs

General Chairs
Vicenç PUIG
UPC, Spain
vicenc.puig (at) upc.edu

Christophe AUBRUN
University of Lorraine, France
christophe.aubrun (at) univ-lorraine.fr

Program Chairs
Marcin WITCZAK
University of Zielona-Gora, Poland
m.witczak (at) issi.uz.zgora.pl

Didier MAQUIN
University of Lorraine, France
didier.maquin (at) univ-lorraine.fr

Industry & Applications Chair
Lothar SEYBOLD
RAFI GmbH & Co. KG, Germany
lothar.seybold (at) rafi.de

Invited Session Chairs
Tushar JAIN
Indian Institute of Technology Mandi, India
Tushar (at) iitmandi.ac.in

Publicity Chair
Mayank Shekhar JHA
University of Lorraine, France
mayank-shekhar.jha (at) univ-lorraine.fr

Finance Chair
Dominique SAUTER
University of Lorraine, France
dominique.sauter (at) univ-lorraine.fr

Registration Chair
Frédéric HAMELIN
University of Lorraine, France
frederic.hamelin (at) univ-lorraine.fr

Publication Chair
Jean-Philippe GEORGES
University of Lorraine, France
jean-philippe.georges (at) univ-lorraine.fr

Important dates
Submission of draft papers:
    April 19th, 2021
Notification of acceptance:
    June 7th, 2021
Final version due:
    July 12th, 2021

Financial Sponsor
Centre de Recherche en Automatique de Nancy (CRAN), France

Technical Co-Sponsors *
IEEE Control Systems Society

(*) The application for CSSI co-sponsorship is in progress. It is subject to acceptance.

It is our pleasure to welcome you in Saint-Raphaël on the French Riviera from September 29th to October 1st for the fifth edition of SysTol!

Special focus on Cybersecurity
In addition to emerging fault-tolerant control systems generally addressed in the successive editions of SysTol, Cybersecurity will play a special role in the fifth edition of SysTol Conference. For decades industrial control systems have been the target of by hackers who use weaknesses in security systems to launch attacks affecting the physical system. These cyber attacks can cause significant damage to the target system, its environment and product quality or production equipment. It then becomes vital to develop detection mechanisms by implementing control filters close to the controlled process. In this context, intrusion detection systems guarantee that the functionality of the system is respected despite attacks, whether in degraded mode.

The conference will bring together academics, engineers and practitioners active in the fields of fault diagnosis, fault tolerant control and their application in process monitoring and maintenance. The conference main aims are:
- to showcase current research results and recent developments in intelligent techniques,
- to present practical applications and emphasize open issues,
- to provide a forum for industry to communicate its needs and priorities.

The four previous editions of the International Conference on Control and Fault-Tolerant Systems (SysTol'10, '13, '16, '19) were successful and demonstrated the needs to establish a permanent scientific forum in the general field of system monitoring, fault diagnosis and fault-tolerant control. The conference on Control and Fault-Tolerant Systems (SysTol'21), through its technical program, will provide a unique opportunity for the academic and industrial community to formulate new challenges, share solutions and discuss future research directions. Topics of SysTol'21 includes (but are not limited to):

Research areas	Industrial applications – Case studies
Fault detection and isolation	Cybersecurity
Fault tolerant control / fault recovery	Transportation systems
Networked control system	Automobile
Health monitoring	Autonomous vehicles
Quality monitoring	Power plants / energy transport
Decision making	Chemical processes
Discrete event and hybrid systems	Aeronautics / aerospace
Supervisory control	Civil engineering
Fault-forecasting methods	Building supervision
Design for reliability and safety	Mining and mineral and metal processing
Model-based methods	Water treatment
Data driven methods	Communication networks
Maintenance policies	Mechatronic and robotic
Risk analysis	Medical device

Paper submission/proceedings
Papers must be submitted electronically by web upload only. Full papers should be submitted in standard IEEE A4 paper and in double-column format. Six pages are allowed for each paper. Submitted papers will undergo a peer review process, coordinated by the Program Chairs and the IPC. Please visit the conference website for more information. Conference Proceedings of the conference will be produced in compliance with IEEE Xplore's PDF requirements for immediate inclusion in the IEEE Electronic Library on IEEE Xplore.

Invited Sessions
Researchers who wish to organize one or more Invited Sessions on topics relevant to the scope of the conference are invited to submit a proposal for consideration. This should include: the title of the session, a copy of the abstract of the session and summaries of individual papers abstracts of each of the proposed participants. Through the submission website, please submit a proposal for session and complete the dedicated fields. An invited session identification code will be provided to the corresponding proposer and should be used by the potential contributors.