

A decorative graphic on the left side of the slide, composed of various shades of blue triangles and hexagons arranged in a complex, overlapping geometric pattern.

LABORATOIRE CENTRE DE TRANSFERT ESIEE AMIENS

Electrical Engineering
Telecommunication
Robotics

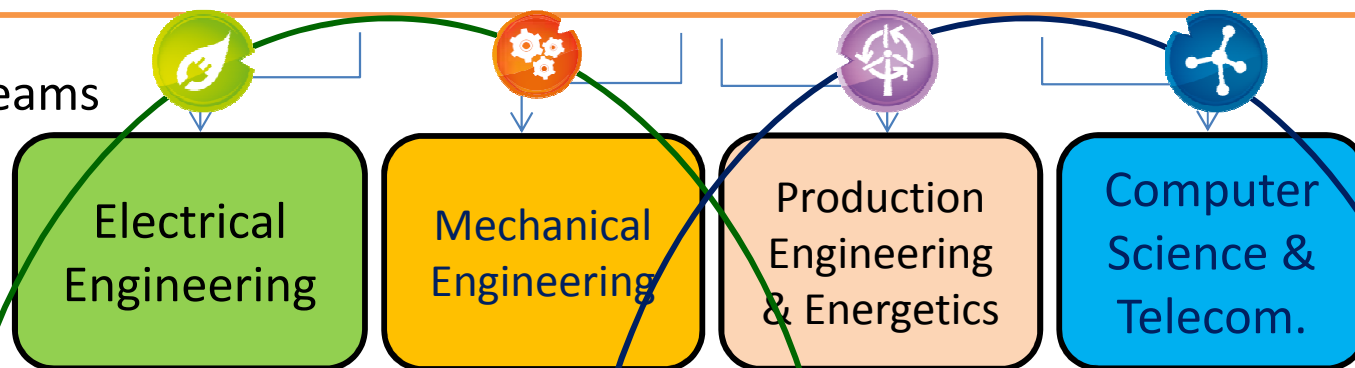


Laboratory Domain Expertise

Research Management: A. Mpanda

Director: J. Fortin

4 teams



Key Words :

EMC of Electrical Machines
Electrical Systems for Generation or Drive
Materials of Electrical Engineering
Power Converters Control-Command
Modeling and Characterising

Key Words :

Robots and automatic processes
Innovation & conception
Modeling
Numerical Methods
Behavioral laws
Process Modeling : shaping, assembly, ...

Key Words :

Data Fusion
Systems interoperability
Imbedded Systems
Control-Command
Systems with artificial intelligence

Key Words :

Complex systems modeling
Sensors networks
Communication protocols
Performance evaluation
Data Fusion
Systems interoperability

2 research topics

COSM : *Conception and optimisation of Multiphysical systems linked to energy*

COSP : *Conception and optimisation of Communicating systems and processes*

Project Examples

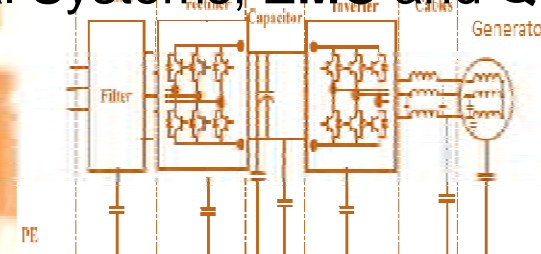
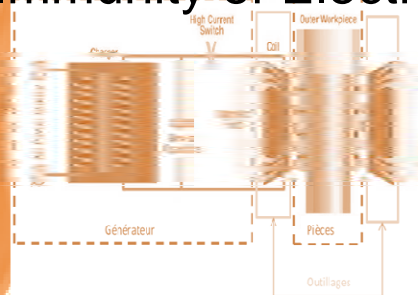
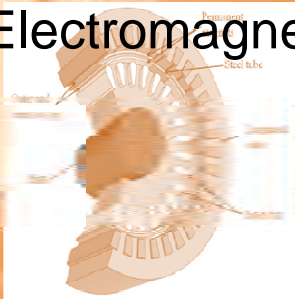
Name	Context	Partners	Topic	Competencies
SEPDC	FP7	MIS, Consortium	Electrical networks in planes	Electrical
PHYLEAS	CRP	Mersen, LTI	Wind turbine control	Electrical
GEOMED	CRP	LTI, LEC	Hybrid Generators for renewable energy	Electrical
RAILCONNECT	FUI	Inoforges, LML, ENSCL	Power transfert in trains	Electrical
COILTIM	IndustriLab	UTC, UPJV(LTI), BASIS, INDUXIAL, BOA, VALEO	Materials assembly with electromagnetics	Electrical Mechanical
DRIVE	IndustriLab	UTC(LMAC), UPJV(MIS)	Battery charging strategies	Computer Science
PATRICK	IndustriLab	APF-Amiens, Ascodero	Separate material recovering	Production
PEERFTRACT	IndustriLab	AGCO, H2PS	Optimisation of thermal engines	Mechanical Energetics

What COSM TOPIC can Offer ?



R&D Missions and Technological Transfer

- Modeling, Conception and Command of **Electromechanical Converters**.
- Modeling, Characterisation and Integration of **Materials for Electrical and Mechanical Engineering**
- **Transmission and Energy Management** for pedestrian – Embedded, On shore – Offshore Systems
- Electromagnetic Immunity of Electrical Systems, **EMC** and **Quality of Energy**



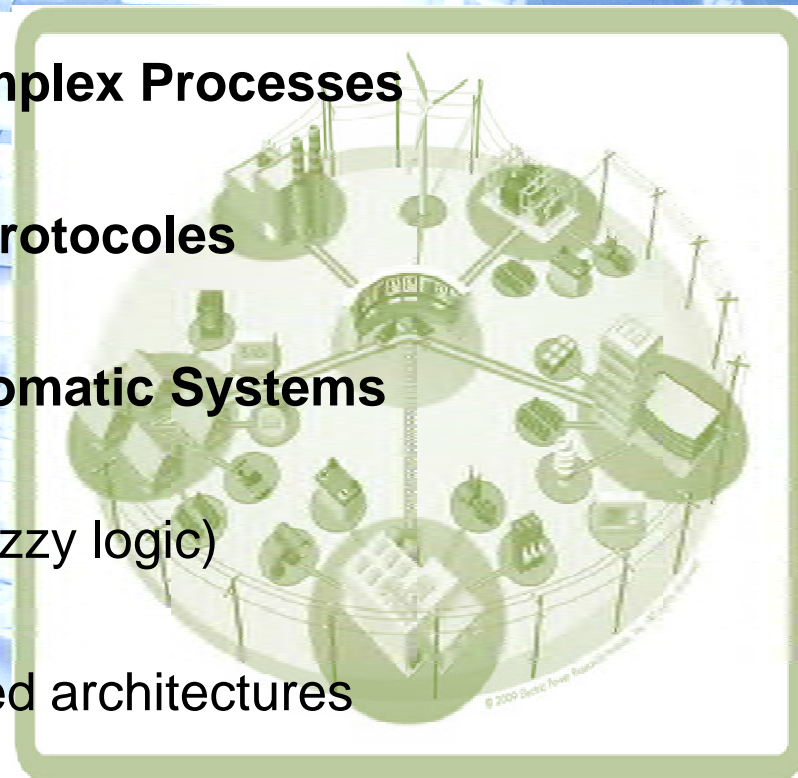


What COSP TOPIC can Offer ?



R&D Missions and Technological Transfer

- Conception of **pedestrian** and **Embedded smart-grids**, **Energy Efficiency** optimisation for buildings
- Conception and adaptation of **Automation of Complex Processes**
- **Data fusion** from sensors and **Communication Protocoles**
- Modeling, Sizing and Optimising **Robots and Automatic Systems**
- **Command Laws** (automatic level control, TDC, fuzzy logic)
- **Algorithms for Real Time** technology in distributed architectures





CONTACTS

Research Direction

Contact name: Augustin Mpanda

Telephone: 03 22 66 20 67

Mail: mpanda@esiee-amiens.fr

COSM TOPIC

Contact name: Olivier MALOBERTI

Telephone: 03 22 66 20 43

Mail: maloberti@esiee-amiens.fr

COSP TOPIC

Contact name: Stéphane Pomportes

Telephone: 03 22 66 20 54

Mail: pomportes@esiee-amiens.fr

