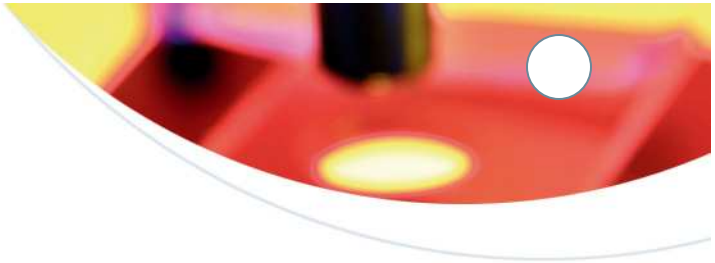
STAE
TOULOUSE

RTRA

Sciences et Technologies pour l'Aéronautique et l'Espace

Thematic Network for Advanced Research

Aerospace Sciences and Technologies



•What are the objectives?

* Promoting excellence and multi-disciplinary work in the Toulouse region for research concerned with aeronautic, space and environment
* Improving the scientific human potential
* Enhancing academic basic research
* Developing new avenues for innovation and future technology
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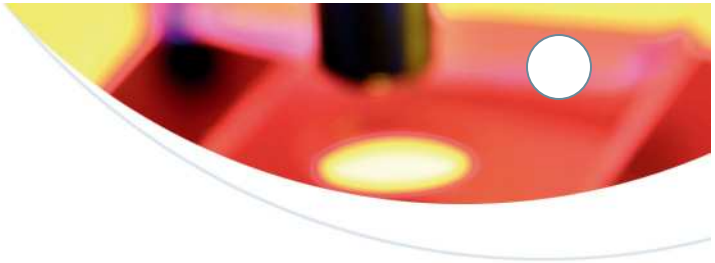

• What are the objectives?

* A transverse competence:
  - Engineering Sciences
  - Science and Technology of Information
  - Life, Earth and Space

How does it work?

•27 laboratories in the Toulouse area

* National initial funding from French Government

* Private foundation to operate the system:
10 founders (CNRS, CNES, ONERA, IRD, University of Toulouse, TOMPASSE …

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How does it work?

- A chairman, a director with a staff

* A Board : founders, local scientists representation, external members

* An International "non local" scientific committee.

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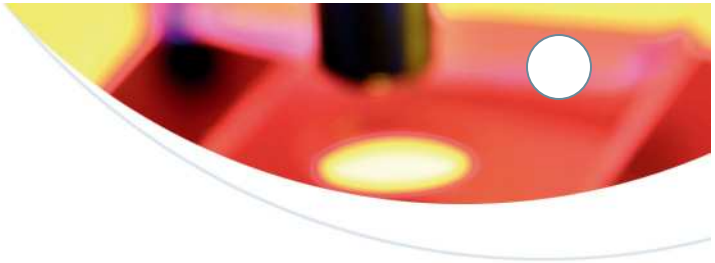
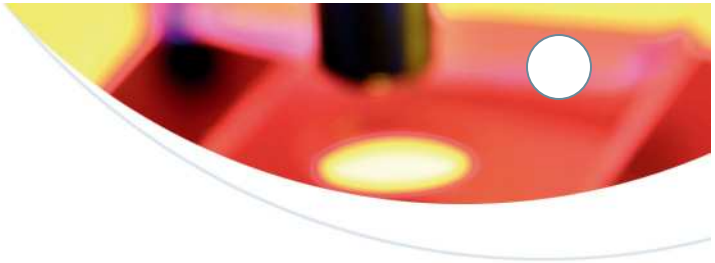


• Projects

Two calls for projects in 2007 and 2008
(initiated by consulting the scientists in the laboratories)

A large response of the community

A selection after review by the scientific council
5 projects starting in 2008, 10 in 2009



Scientific equipment for the Toulouse area

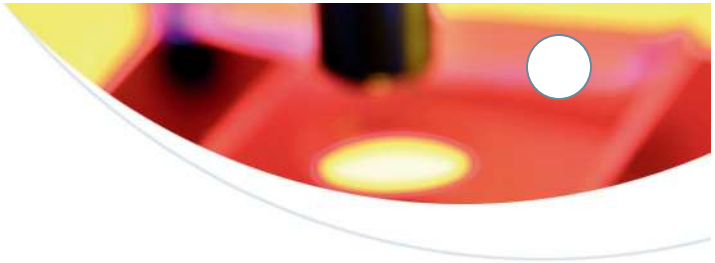
Aerospace campus project including:

- High performance computing (HPC) platform

- Materials micro-analysis platform

- RTRA Headquarters with space for demonstrators and for colloquia

Available early 2013



• Prospective work started in 2009

* Workshop and colloquia
* Six groups tasked with prospective thinking
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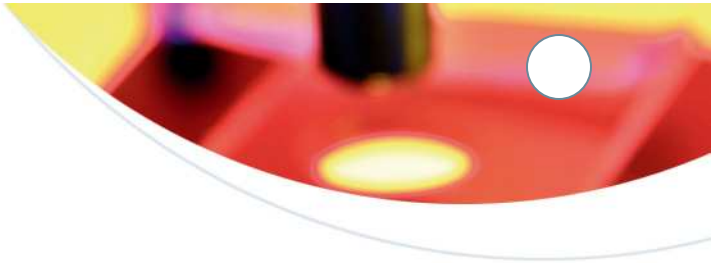
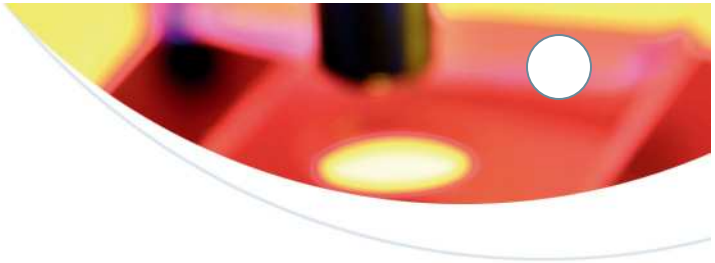


• Prospective work started in 2009

- Aeronautical challenges
- Earth system and space observation
- Embedded systems
- Instrumentation and new sensors
- Mathematical methods
- Enabling technologies



• Prospective work starting now (2010)

From all preceding thinking:

* Eight "chantiers" with *ad hoc* steering committees

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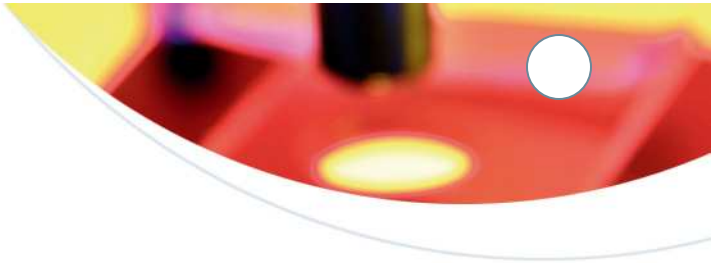

• Prospective work starting now (2010)

* New concepts for improving aeronautical performance
* Human factors in aeronautics
* Time-triggered architecture for embedded systems
* Open-source platform for embedded systems
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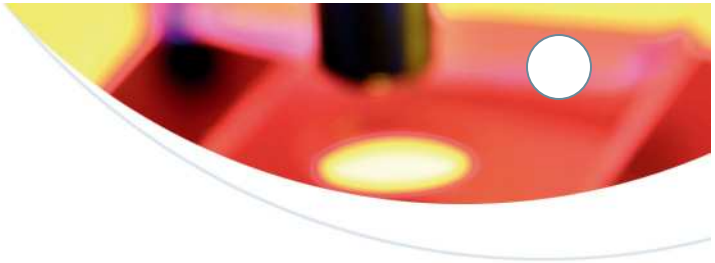
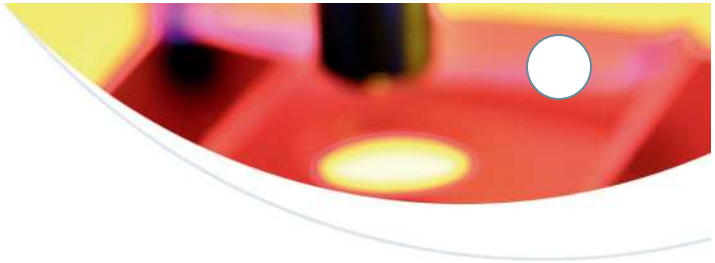


• Prospective work starting now (2010)

* Climate variability at the decadal and regional scales
* Transformation and transport of matter from the continents to the ocean
* Multi-physics and multi-scale (numerical) coupling
* Models and data



http://www.fondation-stae.net/fr/

Laboratories in the projects

Laboratoires	EMMAV	I2MC	MAISOE	MAELIA	ITAAC	ARCS 04	TOTAL 2008	CYMENT	ROSACE	PLASMAX	CASA	SYMIAE	TOTAL 2007	TOTAL GENERAL
CEMES						1	1						0	1
CIRIMAT			1			1	2					1	1	3
CNRM					1		1	1					1	2
CESR		1					1				1		1	2
CESBIO							0	1					1	1
CERFACS					1		1						0	1
DTP							0						0	0
GEODE				1			1						0	1
IRIT				1			1		1				1	2
IMFT	1				1		2	1					1	3
IMT							0			1			1	1
ISAE	1						1						0	1
LA							0	1					1	1
LCA			1				1						0	1
LEGOS			1				1	1					1	2
LGC							0						0	0
LATT							0						0	0
LAAS		1	1				2		1			1	2	4
LMTG			1	1			2	1					1	3
LAPLACE	1				1		2			1		1	2	4
LGMT		1				1	2						0	2
LAME										1			1	1
ONERA							0		1	1			2	2
PHASE		1					1						0	1
LOSE			1				1				1		1	2
ENIT						1	1						0	1

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