









# Optical Localization Techniques Workshop

### **NOW**

Badge and booklet at registration desk
Welcome coffee











## Opening session

- Philippe Perdu (CNES) / CCT MCE
- Christian Boit (TU Berlin) / EUFANET
- Sylvain Dudit (ST) / ANADEF TOD working group
- Pascal Segart (FREESCALE) / TOLSA

## CNES CCT at a glance (1)

### • Origin (1998)

- Corporate network on many space related techniques (ie MCE, EdB)
- Maintain, develop and advantage skills
- Widely opened to other company dealing with space applications or with the core activity of a specific CCT.

### Objectives

- Increase member competences by technical seminar, workshops and tutorials;
- Bring CNES expertise to light;
- Identify existing skills in and out CNES;
- Bring to CNES the outstanding studies and developments made by other sectors;
- Disseminate the outstanding studies and developments made by spatial sector to other sectors.

## CNES CCT at a glance (2)

- Activities
  - Seminars, workshops, think-tank
  - Magazine: "l'actualité composants du CNES"
- Membership interest
  - Free of charge
  - Share knowledge
  - Complete information (emails, magazine, intranet access ...)
- How to join?
  - Form to fill
    - Validated by member management
    - No disclosure agreement
  - Internet <a href="http://cct/cctinfo/accueil.htm">http://cct/cctinfo/accueil.htm</a>











### Workshop organization

- 6 sessions ended by Question & Answers driven by a moderator
- Long coffee break to foster discussions and technical exchanges between attendees and with tool manufacturers
- Workshop logistic (coffee break, Lunches, Lecture Hall) by CCT MCE
- Monday cocktail sponsored by Hamamatsu, DCGsystems, QFI, Semicaps and Digit Concept
- Tuesday CNES lab tour











### Workshop keys

- Organizing committee: Philippe Perdu CNES (F), Sylvain Dudit ST (F), Frank Zaccariasse NXP (NL), Dioniz Pogany TU Vienna (A), Christian Boit TU Berlin (D), Jerome Touzel Infineon (D), Pete Jacob Empa (CH), Eckard Langer AMD (D), Felix Beaudouin IBM (USA), Dean Lewis IMS (Fr)
- Chairperson, Moderator
- Speakers
- Sponsors
- ... 75 registered attendees

Thank you very much and have a fruitful workshop











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## **Optical Dynamic Techniques Working group**

### Organization

- 9 Companies (ATMEL-Rousset, CNES-Toulouse, FREESCALE-Toulouse, INFINEON-Munich, IMS-Bordeaux, LAAS-Toulouse, NXP-Caen, ST-Rousset, Grenoble, Crolles, THALES-Toulouse)
- More than 20 members
- 2-3 meeting per years , 8 meeting, created March 2005
- Dedicated website through <a href="http://www.anadef.org">http://www.anadef.org</a>

### Mission

Study on new failure analysis techniques in dynamic mode (@sensor level or die emulation)

- Emission microscopy : dynamic EMMI, TRE, PICA, ...
- Lasers stimulation : DLS, LADA, PULS, TRLS, ...











### General Objectives

- Status about the state of the art on the dynamic techniques
- Benchmark through test vehicule
  - Equipment benchmarking
  - Techniques benchmarking (techniques application area, sample preparation needed, test emulation,
  - Optical resolution, sensitivity evaluation
- Experience sharing through case of analysis
- Communication through tutorial, publication, ANADEF "atelier"
- Tool improvement in collaboration with subcontractor

### Dedicated Objectives for DLS and Dynamic EMMI

- Emission: spectrography, Vddmin effect, signal intensity, spatial and temporal event discrimination, signal to noise treatment, acquisition time, ...
- Lasers stimulations: Laser interaction, capability, benchmark (pulsed, modulated lasers, methodology, testers influence, ...

# Optical Dynamic Techniques Working group

(TRE - DLS)

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# **Groupe Techniques Optiques Dynamiques** (TRE – DLS)

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## Agenda Monday, January 26

9:00-9:45	Welcome coffee and registration
9:45-10:00	Opening session
10:00-12:40	Session 1 : Static Emission microscopy
12:20-13:10	Lunch
13:10-15:20	Session 2 : Optical probing techniques: Laser Voltage Probing, Time Resolved Emission & Time Resolved Imaging
15:20-16:20	Coffee break attendee / user / tool manufacturer interactions
16:20-18:30	Session 3 : Static laser Stimulation
18:30-20:00	Cocktail party attendee / user / tool manufacturer interactions











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EUropean Failure Analysis Network









## DCG Systems

Providing tomorrow's semiconductor diagnostic solutions today





PHOTON IS OUR BUSINESS

## SEMICAPS

Excellence In Innovation















## Agenda Tuesday, January 27

8:15-10:05	Session 4: Thermography
10:05-11:00	Coffee break attendee / user / tool manufacturer interactions
11:00-13:20	Session 5: Dynamic Laser Stimulation (Part 1)
12:40-13:20	Lunch
13:20-14:30	Session 5: Dynamic Laser Stimulation (Part 2)
14:30-16:10	Session 6: Combined techniques
16:10-16:50	Coffee break attendee / user / tool manufacturer interactions
16:50-17:15	Round table: what do user need?
17:15-17:20	Wrap up
17:30-19:00	CNES lab tour (extended registration info required)