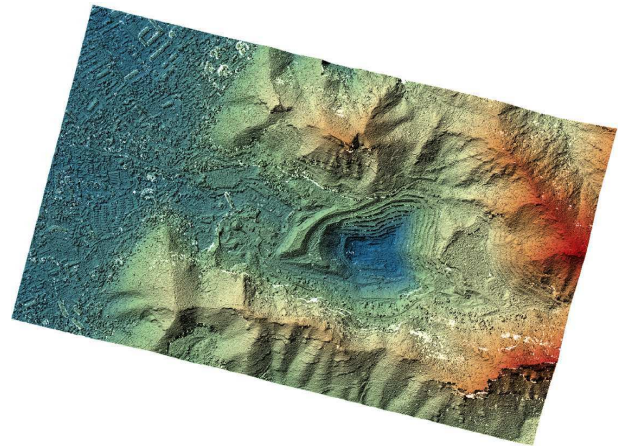


## CNES CCT TSI Workshop

# *3D RECONSTRUCTION*

22-23 June 2017

ENSEEIH, Toulouse, France



### ONLINE REGISTRATION (free but mandatory !):

- ✓ <http://cct.cnes.fr/content/animations-du-cct-17>
- ✓ Select "programme et inscription" in front of "Reconstruction 3D"
- ✓ Select "Registration for this event"
- ✓ Fill in the form

*NB:* The number of participants for each company / lab might be restricted, if a large attendance is foreseen during registration process.

### CONTACTS :

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# PRELIMINARY AGENDA

THURSDAY 22 JUNE 2017

9:00-9:15	<b>Welcome</b>
9:15-9:30	<b>Introduction</b> Eric Boussarie (CNES)
<b>FIRST SESSION: STEREO PIPELINES</b>	
9:30-10:00	<b>Adaptation of the free open source photogrammetric pipeline MicMac to compute sismic deformation from Pléiades acquisition</b> Ewelina Rupnik (DIAS, IGN, ENSG), Marc Pierrot-Deseilligny (Univ. Paris-Est, LASTIG LOEMI, IGN, ENSG), Arthur Delorme (IPGP), Yann Klinger (IPGP)
10:00-10:30	<b>Terrestrial and extraterrestrial surface reconstruction with the Ames Stereo Pipeline</b> Scott McMichael, Oleg Alexandrov, Ross Beyer, Terrence Fong (NASA)
10:30-11:00	<b>Building the Globe in 3D</b> Eric Winther (VRICON)
11:00-11:30	<b>Break</b>
11:30-12:00	<b>3D Geometric modeling of urban scenes from satellite imagery</b> Dorothy Duan (Luxcarta / INRIA)
12:00-12:30	<b>S2P: Satellite Stereo Pipeline</b> Carlo de Franchis, Enric Meinhardt-Llopis, Gabriele Facciolo, Jean-Michel Morel (CMLA), Julien Michel (CNES)
12:30-13:00	<b>3D reconstruction at CNES</b> Julien Michel, Jean-Marc Delvit, Myriam Cournet (CNES), David Youssefi, Christophe Palmann, Loïc Dumas (CS-SI)
13:00-14:15	<b>Lunch</b>
<b>SECOND SESSION: MATCHING ALGORITHMS</b>	
14:15-14:45	<b>Advances in Semi-Global Matching</b> Heiko Hirschmüller (Roboception)
14:45-15:15	<b>Some hidden option of the free open source correlator MicMac</b> Marc Pierrot-Deseilligny (Univ. Paris-Est, LASTIG LOEMI, IGN, ENSG)
15:15-15:45	<b>Multi scale and multi window algorithms</b> Antoni Buades (UIB), Gabriele Facciolo (CMLA), Julia Navarro (UIB)
15:45-16:30	<b>Break</b>
16:30-17:00	<b>Adaptive patch methods for stereo computation</b> Pascal Monasse (LIGM, Ecole des Ponts ParisTech)
17:00-17:30	<b>MGM: A Significantly More Global Matching for Stereovision</b> Gabriele Facciolo, Carlo de Franchis, Enric Meinhardt-Llopis (CMLA)
17:30-18:00	<b>Simulation of high-precision image pairs for low-baseline stereovision</b> Lionel Moisan (Univ. Paris Descartes)

# PRELIMINARY AGENDA

FRIDAY 23 JUNE 2017

THIRD SESSION: APPLICATIONS	
9:30-10:00	<b><i>Integrated Sensor Orientation for UAV photogrammetry</i></b> Mehdi Daakir (Univ. Paris-Est, LASTIG LOEMI, IGN, ENSG; Vinci-Construction-Terrassement/Sixense Mapping), Marc Pierrot-Deseilligny (Univ. Paris-Est, LASTIG LOEMI, IGN, ENSG), P. Bosser (ENSTA Bretagne), Y. Rabot (Vinci-Construction-Terrassement/Sixense Mapping), C. Thom (Univ. Paris-Est, LASTIG LOEMI, IGN, ENSG)
10:00-10:30	<b><i>3D applications using UAV imagery at DelairTech</i></b> Bastien Mancini, Jean Cesario (DelairTech)
10:30-11:30	<b>Break</b>
11:30-12:00	<b><i>3D applications using satellite imagery at SERTIT</i></b> Fahd Benatia (SERTIT)
12:00-12:30	<b><i>Reconstruction of 3D landscapes for the Rosetta mission by stereo and clinometry</i></b> Laurent Jorda (LAM)
12:30-14:00	<b>Lunch</b>
14:00-14:30	<b><i>Photometric 3D-reconstruction: from modeling to resolution</i></b> Jean-Denis Durou (IRIT)
14:30-15:00	<b><i>Multi-date correlation of high and very high spatial resolution optical data for monitoring slope movements</i></b> Jean-Philippe Malet, André Stumpf, David Michéa (Unistra)
15:00-15:30	<b>Break</b>
15:30-16:00	<b><i>New perspectives on landslides and seismic risk studies from very high resolution DEMs</i></b> Pascal Lacroix, Swann Zerathe, Emeline Maufroy (Univ. Grenoble)
16:00-16:30	<b><i>Cryospheric Sciences in 3D: new findings about snow and glaciers using Pléiades and ASTER stereo-imagery</i></b> Etienne Berthier (LEGOS), Simon Gascoin (CESBIO), Renaud Marti (CESBIO, GEODE), Joaquin Belart (LEGOS, Inst. of Earth Sciences, Univ. Iceland), Fanny Brun (LEGOS, IGE Grenoble)
16:30-17:00	<b><i>Conclusions</i></b> Olivier Marsal (CNES)

**WORKSHOP SITE:**  
**INP-ENSEEIH**  
**Amphithéâtre B00**  
2, rue Charles CAMICHEL  
31071 TOULOUSE Cedex 7  
France

**Public transport :**

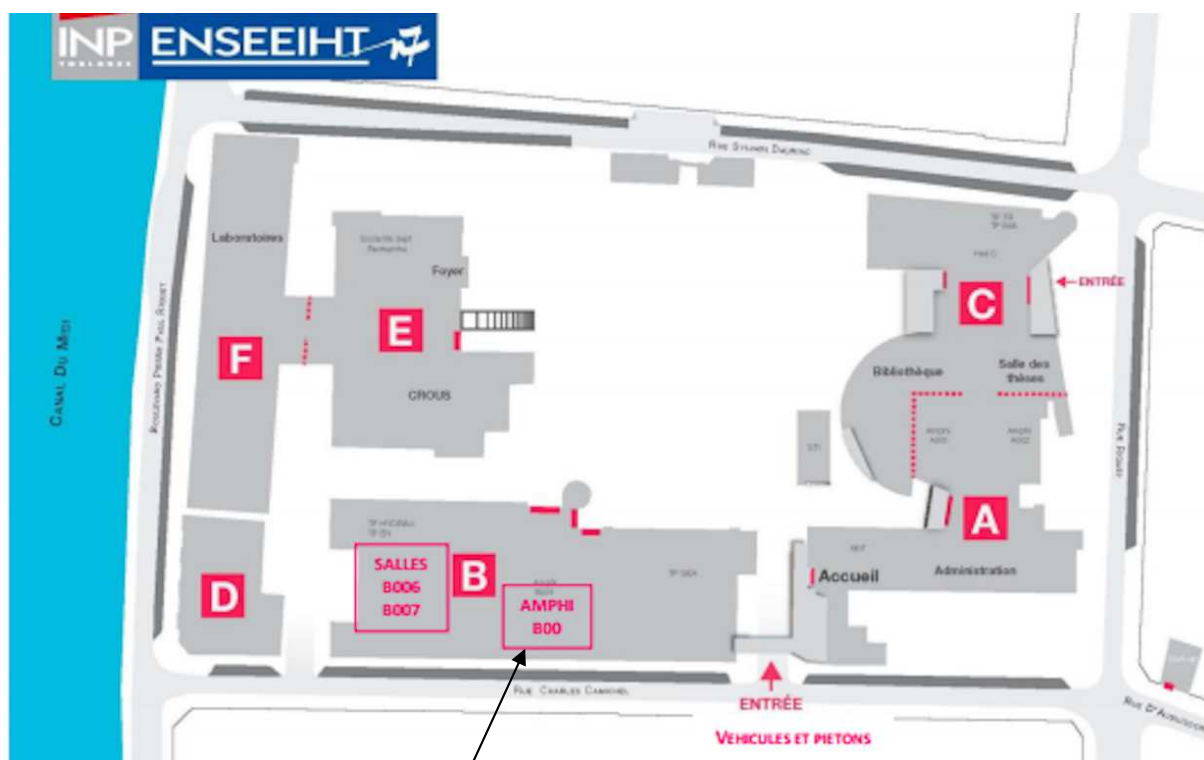
[From the airport](#)

From the airport, take the AERO bus to "Compans-Caffarelli" bus station. Then take the metro, line B, toward "Ramonville", at "Compans-Caffarelli". Get off at the stop "François Verdier" (6min walk from ENSEEIHT).

[From the Toulouse Matabiau train station](#)

From the "Marengo-SNCF" line A metro station, take the metro, line A, toward "Basso Cambo". Get off at the stop "Jean Jaurès" (10min walk from ENSEEIHT).

Please refer to <http://www.tisseo.fr>



Amphithéâtre B00