

FRENCH-AMERICAN SCIENCES



CAFÉ DES
SCIENCES
SST LOS ANGELES

TERAHERTZ WAVES

When European collaborative
Science meets Worldwide Art

TALK + RECEPTION

JUNE 23 • THURSDAY • 6 PM
ALLIANCE FRANÇAISE DE LOS ANGELES
10309 SANTA MONICA BLVD - SUITE 120

Join us at the Alliance Française de Los Angeles to read about how the Terahertz Waves, a frequency band between the radio and infrared, with booming applications, can be used as a cutting-edge non-destructive evaluation method for Art & Heritage.

IN PERSON & ONLINE

OUR SPEAKERS.

**READ ABOUT THEIR RESEARCH PROJECTS
& ENJOY AN OPEN DISCUSSION WITH
THEM, AROUND FRENCH APPETIZERS.**

JEAN-PAUL GUILLET

Visiting Researcher at UCLA

Electrical and Computer Engineering Department

Science Principal Investigator and participant of
ESA, EU, ANR-DFG, Aquitaine Projects about
Terahertz for non-destructive testing, Biomedical,
Art and Millimeter Wave research

Associate Professor at University of Bordeaux
since 2013

PhD completed in 2010 on the THz near field
microscopy at the Montpellier University, France



MONA JARRAHI

Professor and Vice-Chair at UCLA

Electrical and Computer Engineering Department

PhD in electrical engineering from Stanford University

Professor of electrical engineering at UCLA

Research on terahertz/optical device, systems, and
applications on imaging, sensing and communication



THE TOPIC.

FRENCH-AMERICAN RESEARCH COLLABORATION BASED ON A EUROPEAN- MADE FRENCH TECHNOLOGY TO SERVE MANY FIELDS OF APPLICATIONS

While everyone is familiar with radio waves, infrared, visible light and X-rays, a frequency band of electromagnetic waves has remained little known for a long time because of the difficulties in generating such waves and using them: Terahertz waves.

This booming research field has many applications, such as the identification of gases in space (JUICE mission, Herschel telescope), future 6G telecommunications or non-destructive testing applications recently used in the industry.

These waves have the ability to penetrate matter, so we can use them to analyse art works or heritage samples. We can thus see through a painting, to identify old paintings, to help with restoration by identifying signs of ageing.

REGISTRATION REQUIRED