

LPL

LABORATOIRE DE
PHYSIQUE DES LASERS

LPL IS AN 'UNITE MIXTE DE RECHERCHE' OF CNRS AND PARIS 13
UNIVERSITY (UMR 7538).

THE LPL IN FIGURES:

About 80 persons of which

45 tenured researchers

40 papers per year
in international journals

About 20 experimental projects

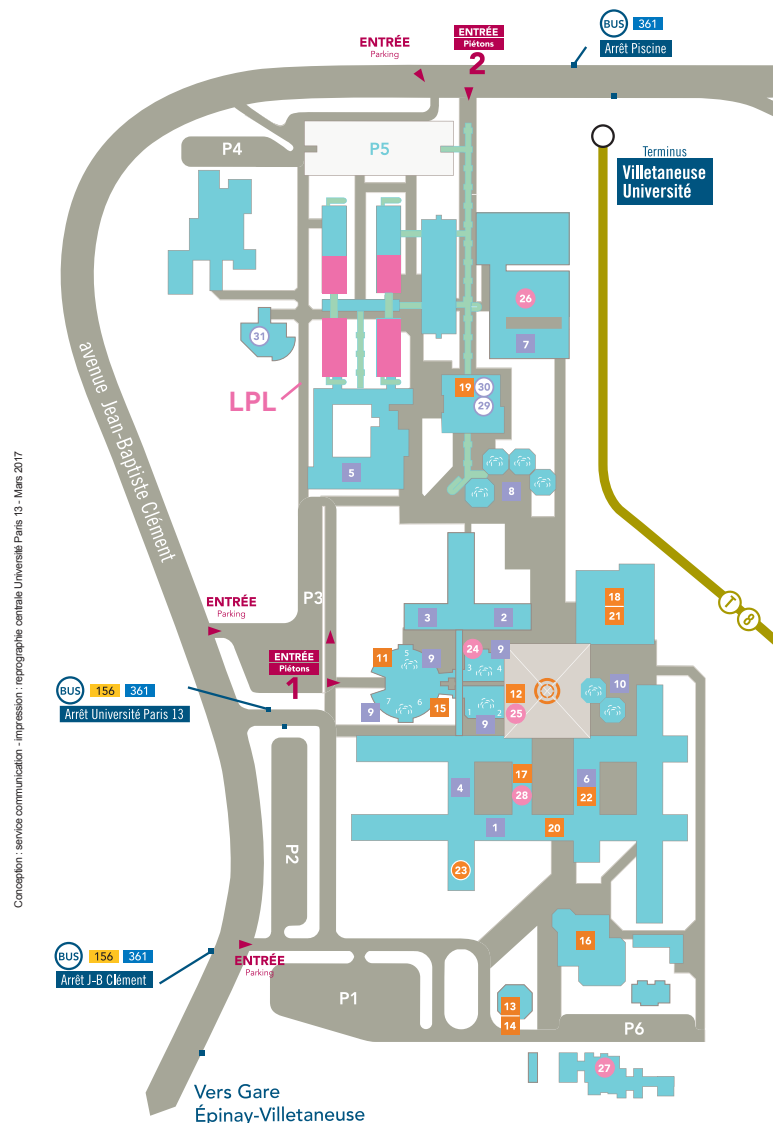
More than 25 international
collaborations

THE LPL IN A FEW WORDS:

- Experimental research
in quantum physics
- Ultra precise measurements in
atomic and molecular systems
 - Photonics
and nanosciences

We study the interactions between light and matter. Our researches cover a range of topics from the most fundamental to the most applied and extend to the boundaries with chemistry, biology, medicine and nanotechnologies.

VILLETANEUSE CAMPUS



Conception : service communication - impression : reprographie centrale Université Paris 13 - Mars 2017

HOW TO REACH US

Rail line H from Gare du Nord to Epinay-Villetaneuse
+ Bus 156 or 361 or Tram T8 from Saint-Denis; Cars should park
at parking P3

CONTACT

LPL- UMR 7538
99 avenue JB Clément - 93430 Villetaneuse
Tél. : 01 49 40 34 00 - adm-lpl@univ-paris13.fr

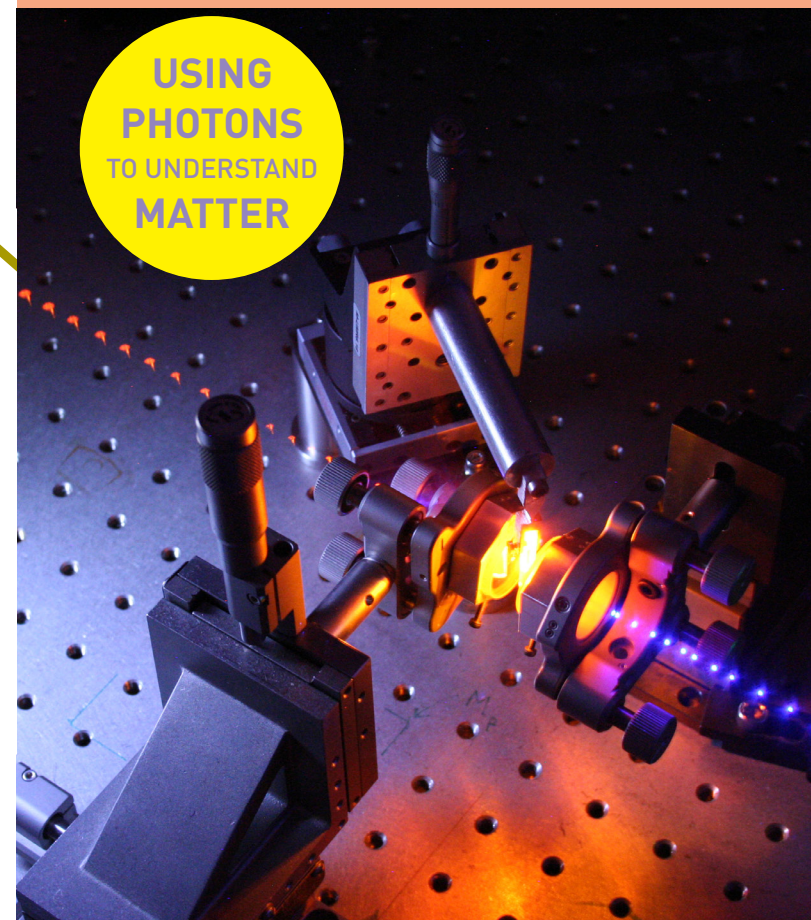
Institut
Galilée

UNIVERSITÉ PARIS 13

LPL

LASER PHYSICS LABORATORY

USING
PHOTONS
TO UNDERSTAND
MATTER



LPL
Laboratoire de
physique des lasers

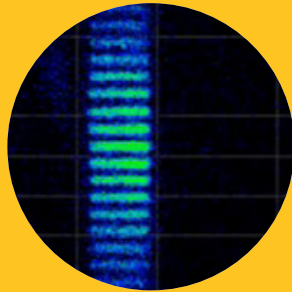
CNRS

www-lpl.univ-paris13.fr

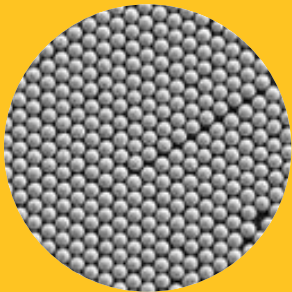
USpc
Université Sorbonne
Paris Cité
CAMPUS
CONDORCET
Paris-Aubervilliers

QUANTUM PHYSICS: ATOMS AND MOLECULES

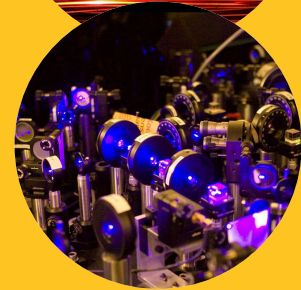
STUDY THE
INTERACTIONS
BETWEEN LIGHT
AND MATTER



Diffraction of matter-waves
using nanostructures



Study atom/surface
interactions



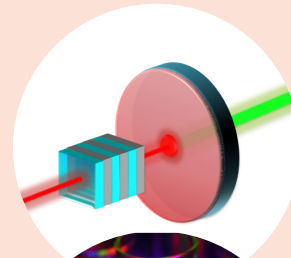
Precise measurements
using molecules to test
the laws of physics



Trapping atoms close
to microfabricated chips

PHOTONICS AND NANOSCIENCES

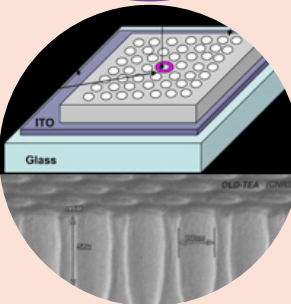
DESIGN AND
REALISE NOVEL
LASER SOURCES



Organic photonics,
OLEDs and lasers



Stabilised lasers and
transfer of ultrastable
frequencies using fibre links



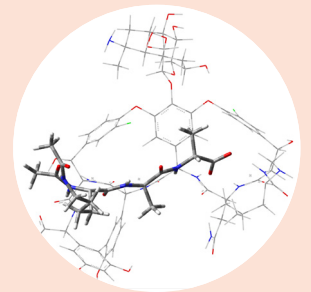
Fabrication of microcavities
and photonic crystals
in clean room



Near-field optics and heat
transfer in the nanoscale

LASERS, LIFE SCIENCES AND BIOMOLECULES

OPTICALLY PROBE
LIFE CONSTITUENTS,
FROM BIOMOLECULES
TO BIOLOGICAL
TISSUES



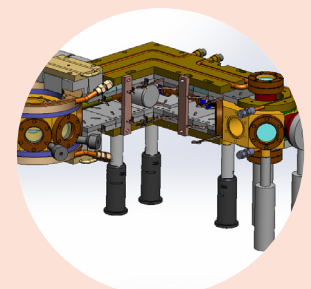
Study the structure
of biomolecules
of pharmacological interest



Light propagation
in biological tissues
for medical diagnostics

THE WORKSHOPS: ESSENTIAL SUPPORTS

REALISE WORK
IN ELECTRONICS,
MECHANICS
AND OPTICS



8 machine-tools
1 computer numerical
control machine



Precision optics