

# 1<sup>st</sup> Symposium GPR LIGHT / LIGHT S&T

Thursday 17<sup>th</sup> November 2022



ICMCB

87 av. Docteur Albert Schweitzer, Talence  
Tram B, Doyen Brus

## 09h00 - Introduction GPR LIGHT

<b>Thrust 1</b> Extreme states of light and matter	09h10	<i>Introduction Thrust 1</i>
	09h20	<b>Scattering of entangled photons from nanostructures</b> > Gabriel MOLINA-TERRIZA, Materials Physics Center UPV/EHU
	09h55	<b>Magnetohydrodynamic and kinetic studies in high energy density magnetized plasmas towards magneto-inertial fusion</b> > Joao SANTOS, CELIA UBx
	10h25	<b>Development of simulation tools to realize an active Thomson Parabola</b> > Arnaud HUBER, LP2I UBx

## 10h40 - Pause Café

<b>Thrust 4</b> Hybridization in biophotonics and imaging	11h00	<i>Introduction Thrust 4</i>
	11h10	<b>Using Light for interrogation of neuronal circuits</b> > Eirini PAPAGIAKOUМОU, Institut de la vision Paris - Photonics department
	11h45	<b>Cryo-electron microscopy, a powerful tool to study the molecular architecture of biomolecular machines in vitro and in vivo</b> > Remi FRONZES, IECB UBx
	12h10	<b>Super-resolution and single molecule imaging reveal topographical control of integrin diffusion in building stable muscle-tendon adhesion</b> > Tianchi CHEN, IINS UBx

## 12h30 - Déjeuner buffet

<b>Thrust 2</b> Hybrid Systems for Quantum Technologies	14h00	<i>Introduction Thrust 2</i>
	14h10	<b>Quantum approaches to nanocavity-enhanced molecular spectroscopy</b> > Javier AIZPURUA, Materials Physics Center UPV/EHU
	14h45	<b>Giant Diffusion of Nanomechanical Rotors in a Tilted Washboard Potential</b> > Yann LOUYER, LOMA UBx
	15h15	<b>Tailoring the degree of entanglement between two coherently coupled quantum emitters</b> > Quentin DEPLANO, LP2N UBx

## 15h30 - Pause café

<b>Thrust 3</b> Downsize all Optics in One	15h50	<i>Introduction Thrust 3</i>
	16h00	<b>Instrumentation par fibre optique pour les environnements sévères au CEA List</b> > Guillaume LAFFONT, Lab. Capteurs Fibres Optiques CEA
	16h35	<b>Second-Order Non Linear Optical/Magneto-optical Techniques: Towards Efficient Chiroptical Techniques</b> > Vincent RODRIGUEZ, ISM UBx
	17h05	<b>Innovative Downsize Optical Integrated Structures for Evanescent-baseD sensing solutions (IDOLISED)</b> > Pauline GIRAUT, IMS UBx

## 17h20 - fin