# ÉCOLE DE PHYSIQUE DES HOUCHES

### 2023 PROGRAM



#### **Optimization and Statistical Learning – OSL 2023**

January 15th - 20th

Alexandre D'ASPREMONT, Zaid HARCHAOUI, Julien MAIRAL, Jérôme MALICK, Philippe RIGOLLET

### Material Engineering to Explore Mammalian and Bacterial Cell Surface Interactions

January 22nd - 27th

Yoann ROUPIOZ, Vincent HUMBLOT, Luc VELLUTINI, Karine GLINEL, Lydie PLOUX

### From Soft Matter to Biophysics - a Workshop in Honor of Jean-François Joanny

January 29th - February 3rd

Jörg BASCHNAGEL, Jens ELGETI, Martin LENZ, Hervé TURLIER

# **Laboratory Astrophysics : Tracking the Evolution of Cosmic Matter towards Molecular Complexity**

February 5th - 10th

Jean-Hugues FILLION, Ludovic BIENNIER, Aude SIMON, Grégoire DANGER

### International Workshop on the Origin of Matter-Antimatter Asymetry CP2023

February 12th - 17th

Matthieu GUIGUE, Guillaume PIGNOL, Stéphanie ROCCIA

### Recent Advances in Understanding Artificial and Biological Neural Networks

February 19th - 24th

Sebastian GOLDT, Sue Yeon CHUNG, Marc MÉZARD

# Applications of Hecke and Related Algebras: Representations, Integrability and Physics

February 26th - March 3rd

Nicolas CRAMPE, Azat GAINUTDINOV, Jérémie GUILHOT, Loïc POULAIN D'ANDECY

#### **Out-of-Equilibrium Physics with Photons and Atoms**

March 5th - 10th

Matthias ALBERT, Isabelle BOUCHOULE, Jérôme DUBAIL, Quentin GLORIEUX

#### **Optimal Transport Theory : Applications to Physics**

March 12th - 17th

Roya MOHAYAEE, Jean-David BENAMOU, Yann BRENIER, Bruno LÉVY, Sabino MATARRESE, Quentin MÉRIGOT

#### Winter School on Therapeutic Ultrasound

March 19th - 24th

Jean-François AUBRY, Gail TER HAAR, Vera KHOKHLOVA

### **Cloud Academy 3: Cloud Formation and Properties in Extrasolar Planets**

March 26th - 31st

Dániel APAI, Christiane HELLING, Mickaël BONNEFOY, Nicolas IRO, Mark MARLEY, Véronique VUITTON

#### Interaction, Disorder, Elasticity GDR Meeting

April 2nd - 7th

Vivien LECOMTE, Elisabeth AGORITSAS, Damien VANDEMBROUCQ

# ImmunoBiophysics: from Fundamental Physics to Understanding the Immune Response - Second Edition

April 9th - 14th

Pierre-Henri PUECH, Katelyn SPILLANE, Paolo PIEROBON, Jérémie ROSSY, Bebhinn TREANOR

#### **Doctoral Training: Optomechanics & Nanophononics**

April 17th - 28th

Rémy BRAIVE, Daniel LANZILLOTTI-KIMURA

#### **Doctoral Training: Plasmas in Extreme Environments: from**

**Astrophysics to the Laboratory** 

May 1st - 12th

Mickael GRECH, Thomas GRISMAYER, Anna GRASSI, Lorenzo SIRONI, Vanina RECOULES, Susanna VERGANI

#### FIPs in the ALPs

May 14th - 19th

Gianluigi ARDUINI, Gaia LANFRANCHI, Maxim POSPELOV

#### **Scientific Approaches of Societal Issues**

May 21st - 26th

Hervé BERCEGOL, Yves GINGRAS, Sylvestre HUET, Roland LEHOUCQ, Gilles RAMSTEIN

# The Physics of Disordered Superconductors and their Application to Quantum Circuits

June 4th - 9th

Milan ALLAN, Mikhail FEIGEL'MAN, Lev IOFFE, Nicolas ROCH, Benjamin SACÉPÉ

### Physics of the TeV Scale and Beyond the Standard Model (PhysTeV) « Intensifying the Quest for New Physics »

June 12th - 30th

Cédric DELAUNAY, Björn HERRMANN, Emanuele RE

#### **Summer School : Theoretical Biological Physics**

July 3rd - 28th

Anne-Florence BITBOL, Thierry MORA, Ilya NEMENMAN, Aleksandra WALCZAK

### Summer School: 200 Years of Navier-Stokes Equations and

Turbulences

July 31st - August 25th

Mickaël BOURGOIN, Nicolas MORDANT, Aurore NASO, John Christos VASSILICOS

# **Quantum Dynamics and Spectroscopy of Functional Molecular Materials and Biological Photosystems**

**Doctoral Training :** August 27th - September 1st

Workshop: September 3rd - 8th

Jérémie LÉONARD, Irene BURGHARDT, Jeffrey A. CINA, Jessica M. ANNA, Thomas RENGER, Young Min RHEE

#### **Bio-inspired Aerial and Aquatic Locomotion**

September 11th - 15th

Ramiro GODOY-DIANA, Eva KANSO

#### **Waves in Complex Media: From Theory to Practice**

September 18th - 29th

Sylvain GIGAN, Nicolas CHERRORET, Alexandre AUBRY

# **Doctoral Training : Ultracold Molecules: Quantum Physics and Applications**

October 9th - 20th

Goulven QUÉMÉNER, Raphael LOPES, Hans LIGNIER, Nadia BOULOUFA

#### Blending the DFT-Based Multiple Scattering Greens' Function Approach to Spectroscopies with Machine Learning

October 30th - November 10th

Didier SÉBILLEAU, Ján MINÁR, Patrick RINKE











