PLAS@PAR
Plasmas à Paris

PLAS@PAR NEWS

Stay connected with the plasma community

Newsletter - WEEK 50

Prix René Pellat de la SFP

Prix de thèse - candidatures.

Prix de thèse pour un.e physicien.ne des plasmas. Les candidatures sont ouvertes jusqu'au **1er mars 2023.** La période d'élégibilité pour les prix de thèses 2022 portent sur les thèses soutenues entre le 1er janvier et le 31 décembre 2022.

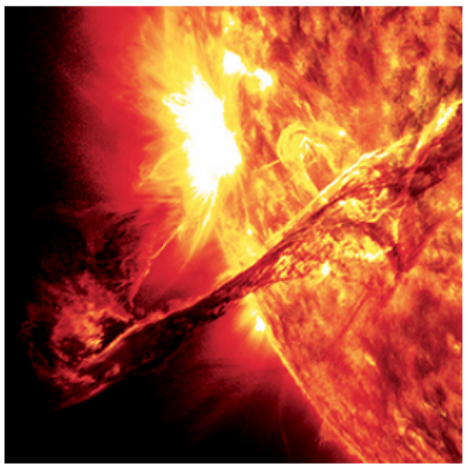
Les candidatures doivent être présentées au choix par :

- l'un·e des membres du jury de la thèse,
- le/la directeur/trice du laboratoire,
- le/la directeur/trice de l'école doctorale,
- le/la directeur/trice de thèse
- un·e responsable d'une section locale ou d'une division de spécialité de la SFP.

MORE INFORMATIONS

Envoyé par Laurence Rezeau

Workshop - February 15-16



QD4ICEC : Workshop on coupled electron-nuclei dynamics for electron capture processes

Inter-particle Coulombic electron capture (ICEC) is a recently discovered environment-enabled electron capture process by means of which a free electron can be efficiently attached to a system (i.e. ion, atom, molecule, or quantum dot). The excess electron attachment energy is simultaneously transferred to a neighboring system which undergoes ionization.

ICEC has been predicted theoretically in van-der-Waals and hydrogen bonded systems as well as in quantum dot arrays. The theoretical approaches employed in these works range from analytical models to ab-initio electronic structure and dynamical calculations. A common assumption in these approaches is that nuclei remain fixed during ICEC.

However, based on observations on the related inter-particle Coulombic decay (ICD), nuclear dynamics should play an important role changing the efficiency and/or influencing the final state of the system. The aim of our workshop is to discuss original quantum-dynamical methods to provide a complete description of ICEC.

The workshop will take place in Paris **(Room 101, Tower 32-42 first floor, Campus Pierre et Marie Curie, 4 Place Jussieu)** on **February 15-16.**

There is no registration fee, but the number of (in-person) participants is limited. The workshop will also be broadcast online, but registration is also mandatory.

Financial supports from : ANR, DFG and Plas@par are acknowledge.

MORE

ECOLE DE PHYSIQUE DES HOUCHES

RAPPEL :
Doctoral Training School on Plasma Physics - May 1 - 12, 2023

Applications are **now open for the 2023** doctoral training school on "Plasmas in extreme environments : from astrophysics to the laboratory" that will take place from **May 1st to May 12, 2023, in Les Houches, France.**

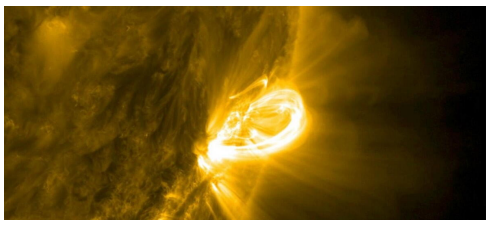
This doctoral training is the 6th session in a series organized at l'Ecole de Physique des Houches since 2011. **It is intended as an 11 day long doctoral training program on plasma physics.** It will cover the basics of the theory and simulation of plasmas.

Space, astrophysical as well as laboratory plasmas will be considered with a special emphasis on the timely topic of plasmas under extreme conditions as found e.g. in the interior of planets, in the most violent astrophysical environments, or created using extreme-light lasers. The school is intended for PhD students, highly motivated Master students and young postdocs.

MORE

Sent by Mickael Grech

La reconnexion magnétique étudiée au LULI et au LPP :



À la Une de l'INP/CNRS et de l'EP.

Actualité commune EP/INP : l'INP a repris sur leur site internet, l'actualité « La reconnexion magnétique étudiée en laboratoire » rédigée, après coordination, par l’École Polytechnique.

MORE DETAILS

RECENSEMENT

Recensement des doctorants et des post-doctorants

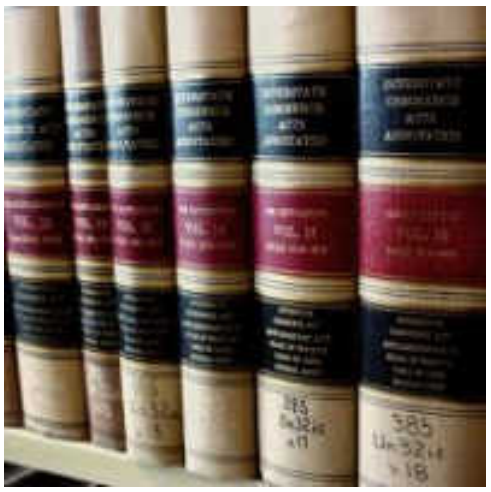
La Société Astronomique de France (SAF) et la Société Française d'Astronomie et d'Astrophysique (SF2A), avec le soutien de l'Institut National des Sciences de l'Univers (CNRS), souhaitent aider les doctorants et les jeunes chercheurs en Sciences de l'Univers (astronomie, planétologie, astrophysique, exobiologie, astrochimie, cosmochimie, cosmologie,...) durant leur thèse et l'après-thèse.

Pour cela, un grand recensement des doctorants et des post-doctorants en Sciences de l'Univers est lancé afin d'être plus proche de ces jeunes chercheurs et être dans la mesure de leur envoyer des propositions directement.

Le recensement se fait simplement via le formulaire sur :

RECENSEMENT

Les plasmas astrophysiques turbulents, accélérateurs de particules :



À la Une de l'INSU/CNRS.

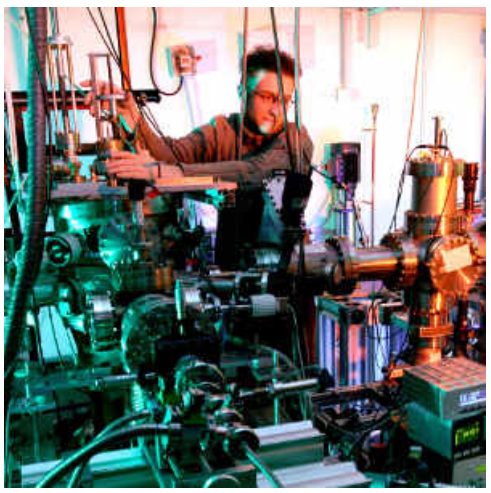
"À l'heure où l'astrophysique multi-messagers connaît un plein essor, une question centrale demeure : où et comment sont produites les particules chargées de haute énergie qui peuplent l'Univers ? Ce problème remonte aux travaux pionniers du célèbre physicien Enrico Fermi qui en a jeté les bases dans un article de 1949 : lorsque des particules chargées (ions ou électrons) se propagent dans un bain de structures magnétisées en mouvement, elles prennent (ou cèdent) de l'énergie aux champs électriques portés par ces aimants mobiles. "

Bonne lecture !

READ MORE

>>> Envoyé par Laurence Rezeau

APPEL



Post-Doctoral Scientist on the Electrical sensors of DraGMet/Dragonfly (Titan) at LATMOS :

Titan, Saturn's biggest moon, is an ocean world, covered by organic materials and therefore one of the most promising astrobiological target in the Solar System, likely holding clues on the origin of life on Earth. That is why NASA has selected the Dragonfly mission to send in 2027 a rotorcraft lander to Titan in order to investigate its prebiotic chemistry and habitability. The present post-doctoral proposal aims at optimizing the design and therefore scientific return of the DIEL (measurement of the ground complex permittivity) and EFIELD (measurement of the time-varying electrical field) experiments onboard the DraGMet (Dragonfly Geophysical and Meteorological) package. These experiments have multiple and complementary objectives all related to a better characterization of Titan's environment (ground composition, moisture, porosity; presence of suspended charged particles etc.) and habitability (existence and depth of a buried ocean).

Contact : Alice Le Gall (alice.legall@latmos.ipsl.fr)

MORE DETAILS

Envoyé par Alice Le Gall

Opening of a postdoc position at KULeuven :

We look for a postdoc interested in studying space plasmas using supercomputers. We look for an individual that within the context of the new HPC Europa project SPACE will develop new particle in cell methods for the latest generation of supercomputers that include CPU and GPU. The goal is to use these new methods to obtain new important results on the physics of space processes, with focus on the solar wind and the planetary magnetospheres.

The code we use is iPic3D, a Particle-In-Cell (PIC) software used for the study of space plasmas. The code is developed in C/C++ and is currently implemented in CPU but we are now active in he use of GPUs with openMP and OpenACC

MORE

Send by Giovanni Lapenta

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