
1. Ecole "Space-Inn school on astero/helioseismology and stellar/Solar physics" - 26-28 octobre
2015, Saclay

The school will be in Service d'Astrophysique, in Saclay (south of Paris), France

Each day will have a main topic, split between Lectures in the morning for about 3 to 4 hours and then "Hands on Computer" for the remainder of the day. Coffee breaks and lunches will be complementary with no registration fees.

Day 1:

Stellar Internal Wave Physics by Dr. S. Mathis & Prof. M. Thompson
Lectures on the physics of waves inside stars (p, g modes, gravity-inertia-alfvenic waves) and on inversion techniques in (helio)seismology

Hands on computer: attendants will learn to develop a general p/g mode ray tracing code

Day 2:

Asteroseismology by Dr. R.A. Garcia & Dr. E. Corsaro
Lectures on Kepler and Corot light curves and discoveries, rotation and magnetism proxies, data signal analysis and ensemble asteroseismology

Hands on computer: data analysis of Kepler/Corot and SoHO/GOLF light curves

Day 3:

Stellar Dynamo and Wind by Dr. A.S. Brun and V. Reville
Lectures on the origin of solar and stellar magnetism, dynamo theory, the interplay between convection, rotation and magnetism and solar/stellar wind physics

Hands on computer: choose between the development of a 2-D mean field cartesian dynamo code or of a 2-D Parker-like wind model

The students will learn waves physics, use it to interpret light curves and make the link with the source of stellar variability and rotation history via stellar dynamo and wind theory.

For interested applicants, please send an email to both Sacha Brun (sacha.brun@cea.fr) and Rafael Garcia (rafael.garcia@cea.fr).

Transmis par A.S. Brun et R.A. Garcia