

**Irfu**Institut de recherche  
sur les lois fondamentales  
de l'Univers**Séminaire  
SPP****Lundi 09/09/2013, 11h00**

CEA-Saclay Bat 141, salle André Berthelot

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# The Human Brain Project : an interplay between biology, theory and neuromorphic circuit design

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The Human Brain Project (HBP) is one of the two "flagship" projects awarded by the European Community (Future and Emerging Technologies program). The HBP is a 10-year program for studying the mechanisms of brain function using a combination of biological experiments, theoretical modeling, numerical simulation, and VLSI technologies (neuromorphic circuits). It involves more than 200 laboratories across Europe and worldwide. The roots of the HBP lies in two precursor European projects, called FACETS and BrainScales. These projects combine biology, computation and neuromorphic hardware design, three communities which are at the heart of HBP. In particular, to implement in VLSI the principles discovered by biological experiments, it is necessary to develop mathematical models, which therefore gives a key role for theory and modeling in this project.

<http://www.humanbrainproject.eu>

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Le café sera servi 10 minutes avant.

NB : La présentation d'une pièce d'identité est exigée à l'entrée du centre. Tous les auditeurs extérieurs sont priés de prévenir à l'avance Martine Oger, tél. 01 69 08 23 50, e-mail : [martine.oger@cea.fr](mailto:martine.oger@cea.fr). (U.E. : délai de 24 h, hors U.E. : délai de 4 jours).