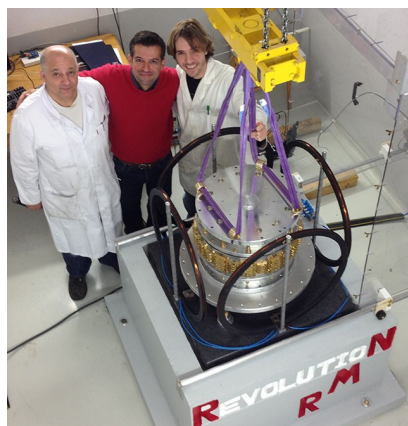


" Recent advances in Magnetic Resonance Instrumentation towards new tools for biomedical analysis "



MRS and MRI have revolutionized chemical and biomedical sciences. Complementary to high field, the use of low magnetic fields offers unique advantages for example where magnetic susceptibility is the dephasing mechanism, or where molecular motion reflects on relaxation and thus in imaging contrast. The possibility to combine low and high magnetic fields in the same experiment offers new ways for analysis. New portable and one-sided magnet designs will be presented as well as the first preclinical rapidly Magic Angle spinning MRI system. A mechanical sample shuttling device for high-resolution relaxometry will be demonstrated used for analyzing molecular motions in proteins as well as T1 times of contrast agents over a large variety of fields (from 0.05 T up to 17T).

Dr Dimitrios SAKELLARIOU

Physical Science Division

IRAMIS/NIMBE/LSDRM

CEA Saclay

Invité par Jean-Claude BELCÉIL

Vendredi 5 juin 2015 à 11h

Salle de conférence du CBM