1063-46-158 **Cyril Houdayer*** (cyril.houdayer@umpa.ens-lyon.fr), UMPA, ENS de Lyon (site Sciences), 46 allee d'Italie, 69364 Lyon, France. *Approximation properties and absence of Cartan subalgebra for free Araki-Woods factors.*

In this talk, we show that all the free Araki-Woods factors $\Gamma(H_{\mathbf{R}}, U_t)''$ have the complete metric approximation property. Using Ozawa-Popa's techniques, we then prove that every nonamenable subfactor $\mathcal{N} \subset \Gamma(H_{\mathbf{R}}, U_t)''$ which is the range of a normal conditional expectation has no Cartan subalgebra. We finally deduce that the type III_1 factors constructed by Connes in the '70s can never be isomorphic to any free Araki-Woods factor, which answers a question of Shlyakhtenko and Vaes. This is joint work with Éric Ricard. (Received August 15, 2010)