

Solvay Workshop on 'Beyond the Standard model with Neutrinos and Nuclear Physics'
(Nov 29th - Dec 1st)

PROGRAM

Wednesday November 29, 2017		Time	Speaker (Institute)
10:00 - 13:00	Nuclear physics and the unitarity of the CKM matrix		
The current evaluation of $ V_{ud} $ and the top-row test of CKM unitarity		30	John Hardy (Texas A&M Univ.)
Experimental challenges in extracting the V_{ud} matrix element		30	Bertram Blank (Univ. de Bordeaux)
Mirror beta transitions and CKM unitarity		30	Oscar Naviliat-Cuncic (Michigan State Univ.)
The neutron and CKM unitarity		30	Bastian Märkisch (Techn. Univ. München)
13:00 - 14:00 LUNCH (at the university's cafeteria)			
14:00 - 18:00 (Coffee 30 min)	Electric dipole moment searches		
Introduction to and overview of EDM measurements		30	Rob Timmermans (Univ. Groningen)
Overview and status of neutron EDM experiments		30	Philipp Schmidt-Wellenburg (Paul Scherrer I.)
EDM measurements with storage rings - the proton EDM		25	Gerco Onderwater (Univ. Groningen)
EDMs of stable atoms and molecules		30	Werner Heil (Univ. Mainz)
EDM measurements with radioactive probe nuclei		25	Klaus Jungmann (Univ. Groningen)
18:00 DRINK (in hall adjacent to the Solvay room)			
Thursday, November 30, 2017			
9:00 - 13:00 (Coffee 30 min)	Nature of neutrinos - Dirac/majorana neutrinoless double beta decay - g_A quenching		
The Nature of Neutrinos		25	Boris J. Kayser (Fermilab)
Direct neutrino mass measurements		25	Volker Hannen (Univ. Münster)
Double beta decay matrix elements and quenching of g_A		25	Jouni Suhonen (Univ. of Jyväskylä)
Neutrinoless $\beta\beta$ decay matrix elements: present and future		25	Javier Menéndez (Tokyo Univ.)
Neutrinoless double beta decay and new physics		25	Manfred Lindner (Max-Planck-I. fuer Kernphysik)
Supernova neutrinos		25	Kate Scholberg (Duke Univ.)
13:00 GROUP PHOTO (before leaving for lunch)			
13:10- 14:00 LUNCH (at the university's cafeteria)			
14:00 - 18:00 (Coffee 30 min)	Magnetic moments		
Neutrino magnetic moments		25	Julian Heeck (ULB - PhysTh)
Neutrino magnetic moments (Borexino)		25	Oleg Smirnov (JINR, Dubna)
Mass hierarchy			
Neutrino mass ordering: Hints and challenges		25	Eligio Lisi (INFN Bari)
The JUNO reactor neutrino experiment - neutrino hierarchy		25	Alberto Garfagnini (Univ. of Padova)
The NoVA experiment - neutrino hierarchy		25	Jeff Hartnell (Univ. of Sussex)
The IceCube experiment		25	Darren Grant (Univ. of Alberta)
19:30 BANQUET ("Maison du Cygne", Brussels' Grand Place)			
Friday December 1, 2017			
9:00 - 13:00 (Coffee 30 min)	Reactor neutrino spectrum and steriles - Short baseline oscillations		
The reactor neutrino spectrum		25	Muriel Fallot (Subatech, Nantes)
Beta decay and the reactor neutrino anomaly		25	Anna Hayes (LANL, Los Alamos)
Beta decay spectrum shape and the reactor neutrino anomaly		25	Leendert Hayen (KU Leuven)
Expt. study of the beta decay of fission fragments		25	Alejandro Algora (CSIC, Univ. of Valencia)
Neutrino fit with steriles		25	Antonio Palazzo (Univ. di Bari)
The Daya Bay experiment		25	Ming Chung Chu (Univ. Hong Kong)
13:00 - 14:00 LUNCH (at the university's cafeteria)			
14:00 - 17:00 (Coffee 30 min)	Short baseline oscillations		
The STEREO experiment		25	David Lhuillier (CEA-Saclay)
The DANSS experiment		25	Mikhail Danilov (Lebedev Physical I., Moscow)
The SOLID experiment		25	Nick van Remortel (Univ. Antwerpen)
The SOX experiment		25	Stefano Davini (INFN, Genova, Italy)
Closing			