LRT2010 – Draft Program Agenda (Rev 5)

Surface auditorium, SNOLAB building, Vale Creighton Mine #9, Sudbury (Canada)
28th-29th August 2010

Saturday 28th August

8:00-8:45	Registration desk open. Coffee, juice and pastries available.
8:45am	Start of workshop conference
5 min	SNOLAB Welcome (Nigel Smith - SNOLAB Director)
5 min	LU Welcome (P. Sawyer – LU VP Research or D. Giroux – LU President)
5 min	Workshop overview, announcements, and administration comments (R. Ford)
9:00-10:20	**Session 1 – Overview of global low radioactivity measurement facilities (chair: A. McDonald)**
20 min	North American facilities – Reyco Henning
20 min	European facilities – Luciano Pandola
20 min	Asian facilities – Masayuki Nakahata
20 min	Future facilities: DUSEL – Murdock Gilchriese
10:20-10:40	Coffee break
10:40-12:30	**Session 2 – Low background counting techniques (chair: T. Noble)**
20 min	Ultra high purity ICP-MS – Balz Kamber
20 min	NAA techniques and applications – Ryan MacLellan
20 min	Ultra-sensitive NAA measurement of ^{232}Th in copper – Massimiliano Clemenza
20 min	High efficiency liquid scintillator neutron vetoes – Alex Wright
20 min	BiPo detector for ultralow radioactivity measurements – Mathieu Bongrand
10 min	*Extra questions and discussion*
12:30-1:30	Lunch break
1:30-3:30	**Session 3 – Screening facilities and low background detectors (chair: N. Smith)**
20 min	FAARM at DUSEL – Prisca Cushman
20 min	Low background counting at SNOLAB – Ian Lawson
20 min	Low background physics at Kimbalton Mine – Sean MacMullin
20 min	Radon at Homestake and the Sanford low background lab - Keenan Thomas
20 min	Muon-shielded counting facility at Soudan – Nathaniel Pastika
10 min	XIA surface alpha counter – Jodi Cooley
10 min	Betacage at CDMS – Zeesh Ahmed
3:30-3:50	Coffee break
3:50-5:30	**Session 4 – Fabrication methods and surface contamination control (chair: D. Sinclair)**
20 min	Background reduction in electroformed UHP-Cu – Eric Hoppe
20 min	Radon daughter deposition model – Vince Guiseppe
20 min	Acrylic purifications and coatings – Marcin Kuzniak
20 min	Production of low radioactivity crystals for CUORE – Ioan Dafinei
20 min	Low radioactivity CaF_2 scintillator crystals for CANDLES – Izumi Ogawa

Sunday 29th August

8:30-9:00	Coffee, juice and pastries available.
9:00-10:40	**Session 5 – Experiments using low background techniques (chair: A. Hallin)**
20 min	Low background techniques at XMASS – Atsushi Takeda
20 min	Front end electronics and cable for Majorana Demonstrator – James Loach
20 min	Low background issue in Edelweiss-II – Pia Loaiza
20 min	Low background techniques in SuperNEMO – Frederic Perrot
20 min	Background reduction for DEAP3600 – Bei Cai
10:40-11:00	Coffee break
11:00-12:30	**Session 6 – Low background cryogenic and gas purification techniques (chair: C. Virtue)**
20 min	Low background techniques in GERDA – Hardy Simgen
20 min	Behavior of ^{222}Rn at cryogenic temperatures – Sebastian Lindemann
20 min	Xe purification and Rn measurement for EXO – Jacques Farine
20 min	Rn-free air production and cleanroom system – Aksel Hallin
10 min	Radon diffusion in Polyethylene – Wolfgang Rau
12:30-1:30	Lunch break
1:30-3:10	**Session 7 – Low background liquid purification techniques (chair: M. Nakahata)**
20 min	Kamland liquid scintillator and gas purification – Sei Yoshida
20 min	Production and purification of Nd-scintillator – Sunej Hans
20 min	Lead removal from liquid scintillator for low background Kamland – Greg Keefer
20 min	Production and counting of uncontained sources in SNO – Simon Peeters
20 min	SNO+ scintillator purification and assay – Richard Ford
3:10-3:30	Coffee break
3:30-4:20	**Session 8 – Background studies, models, and simulations (chair: M. Chen)**
20 min	Background simulations and shielding calculations – Vitaly Kudryavtsev
20 min	Monte Carlo Simulation of Low Background Experiments – Henrique Araujo
20 min	Production and suppression of ^{11}C – Quirin Meindl
20 min	Background studies in Xenon100 dark matter experiment – Marc Weber
4:20-5:15	**Session 9 – Discussion on co-ordination and resource sharing (chairs: P. Cushman / R. Ford)** 1) Coordinated use of HPGe gamma-ray spectrometers, other gamma-ray and neutron detectors by different groups/collaborations; 2) Databases of material purity; 3) Joint purchasing of radio-pure materials; 4) Monte Carlo simulation tools; 5) Radon emanation measurements; 6) Purification processes etc.
5:15-5:30	**Workshop wrap-up and discussions** Closing comments and plans for a future workshop.
5:30pm	End of workshop conference

Posters

Ultra-low background alpha counting for SuperCDMS – Lauren Hsu
Combination sorption and precipitation for treatment of liquid radioactive waste – Vera Pllumaj
Production and and purification of depleted argon gas – Henning Back/Cristiano Galbiati
Low background Ge Gamma Spectrometers – Matthias Laubenstein
Surface impurities and cleaning techniques – Grzegorz Zuzel
Improved Scintillator Materials for Compact Electron Antineutrino Detectors - Peter Dijkstra