

# Workshop Agenda: Determination of the absolute electron (anti-)neutrino mass

ECT\*, Trento, April 4-8, 2016

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	Mon, 4 Apr.	Tue, 5 Apr.	Wed, 6 Apr.	Thu, 7 Apr.	Fri, 8 Apr.
9:00	<b>Registration</b>	<b>Spectrum calculation</b>	<b>CvB</b>	<b>Instruments (calorimeters)</b>	<b>Conclusions I</b>
	<b>9:30 Welcome (10')</b>	<b>A. Saenz:</b> Final states in tritium beta decay: status and perspectives (35'+5')	<b>C. Lunardini:</b> Phenomenology of relic $\nu$ detection (35'+5')	<b>C. Hassel:</b> Optimization of MMC arrays with embedded $^{163}\text{Ho}$ for ECHO (25'+5')	
	<b>Theory &amp; cosmology overview</b>	<b>A. Fäbler:</b> Can one determine the $\nu_e$ mass by electron capture? (35'+5')	<b>Z. Z. Xing:</b> Flavor effects in relic $\nu$ detection (35'+5')	<b>S. Kempf:</b> Microwave SQUID multiplexing for ECHO (25'+5')	<b>F. Glück:</b> Right-handed currents and the $\nu$ mass (35'+5')
	<b>W. Rodejohann:</b> Theory and phenomenology of $\nu$ mass (35'+5')	<b>A. de Rujula:</b> A tale of two holes (35'+5')	<b>M. Lusignoli:</b> Relic (anti-) $\nu$ detection with $\beta$ -decaying and electron capturing isotopes (35'+5')	<b>J. Hays-Wehle:</b> TES microcalorimeter design for HOLMES (25'+5')	<b>G. Drexlin:</b> Tritium $\beta$ -decay experiments— past and future challenges (45'+5')
	<b>S. Hannestad:</b> Massive neutrinos in cosmology (35'+5')			<b>E. Ferri:</b> Bandwidth requirements & eff. time resolution in HOLMES (25'+5')	
11-11:30	<b>Coffee break</b>				
	<b>Q value determination</b>	<b>Sources I</b>	<b>Oscillations &amp; SN neutrinos</b>	<b>Sterile <math>\nu</math>: theory &amp; cosmology</b>	<b>Conclusions II</b>
	<b>E. Myers:</b> Atomic mass measurements of $^3\text{H}$ and $^3\text{He}$ (35'+5')	<b>U. Köster:</b> Reactor production of $^{163}\text{Ho}$ (25'+5')	<b>T. Schwetz-Mangold:</b> Neutrino oscillations and implications (35'+5')	<b>M. Totzauer:</b> Production mechanisms for sterile $\nu$ DM (35'+5')	<b>C. Giunti:</b> Concluding remarks (55'+5')
	<b>S. Eliseev:</b> High-precision Penning-trap mass spectroscopy for ECHO (35'+5')	<b>C. Düllmann:</b> Production & chem. isolation of $^{163}\text{Ho}$ for ECHO (25'+5')	<b>Discussion</b>	<b>M. Drewes:</b> Heavy $\nu$ in particle physics and cosmology (35'+5')	<b>Discussion</b>
		<b>M. Croce:</b> $^{163}\text{Ho}$ prod., isolation, and absorber inc. for NuMECS (25'+5')			
13-15	<b>Lunch break</b>				
	<b>Experiments overview I</b>	<b>Sources II</b>	<b>Instruments (spec. + det.)</b>	<b>Experiment: sterile <math>\nu</math> and future <math>\nu</math>-mass</b>	
	<b>C. Weinheimer:</b> The KATRIN Experiment (25'+5')	<b>K. Wendt:</b> Laser mass spectrometric separation & implantation of $^{163}\text{Ho}$ for ECHO (25'+5')	<b>T. Thümmler:</b> Commissioning of the KATRIN spectrometer & det. section (25'+5')	<b>T. Lasserre:</b> Experimental searches for eV-scale sterile neutrinos (25'+5')	
	<b>J. Formaggio:</b> The Project 8 Experiment (25'+5')	<b>B. Bornschein:</b> Seven decades of tritium sources for $\nu$ mass determination (25'+5')	<b>D. Parno:</b> Electron detection for KATRIN (25'+5')	<b>S. Mertens:</b> Experimental searches for keV-scale sterile neutrinos (25'+5')	
	<b>C. Tully:</b> The PTOLEMY Experiment (25'+5')	<b>H. Seitz-Moskaliuk:</b> The windowless gaseous tritium source for KATRIN (25'+5')	<b>P. Ranitzsch:</b> Non-tritium electrons for KATRIN (25'+5')	<b>M. Fertl:</b> Project 8: towards cyclotron radiation emission spectroscopy of tritium (25'+5')	
16:30-17	<b>Coffee break</b>				
	<b>Experiments overview II</b>	<b>Sources III</b>	<b>Poster session</b>	<b>Background</b>	
	<b>C. Enss:</b> The ECHO Experiment (25'+5')	<b>D. Venos:</b> Krypton calibration sources for KATRIN (25'+5')		<b>B. Alpert:</b> Algorithms for ID of nearly-coincident events in cal. sensors (25'+5')	
	<b>A. Nucciotti:</b> The HOLMES Experiment (25'+5')	<b>B. La Roque:</b> Design and performance of the Project-8 phase-1 detector (25'+5')		<b>S. Scholl:</b> Background analysis for ECHO (25'+5')	
	<b>M. Croce:</b> The NuMECS Experiment (25'+5')			<b>F. Fränkle:</b> Background studies for KATRIN (25'+5')	
18:30	<b>Adjourn to dinner</b>				