



**The Abdus Salam  
International Centre for Theoretical Physics**



**1833-43**

**Workshop on Understanding and Evaluating Radioanalytical  
Measurement Uncertainty**

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**Combined Uncertainty in the determination of  $^{90}\text{Sr}$  by Liquid Scintillation  
Counting - LSC**

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		Gross cpm				Average				fy	u <sub>fy</sub>	Net count rate (cpm) corrected for <sup>90</sup> Y in-growth		f <sub>a/d</sub>	u <sub>fa/d</sub>
sample name	replicate No.	window A, I <sub>A</sub>	U <sub>IA</sub>	window B, I <sub>B</sub>	U <sub>IB</sub>	window A, I <sub>A, Bkg</sub>	U <sub>IA, Bkg</sub>	window B, I <sub>B, Bkg</sub>	U <sub>IB, Bkg</sub>			K	U <sub>K</sub>		
Soil-6	1	11.174	0.238	4.442	0.150					0.674	0.008	5.07	0.29	0.9598	0.0002
	2	10.895	0.235	4.402	0.149					0.674	0.008	4.82	0.29	0.9598	0.0002
	3	11.027	0.236	5.080	0.160					0.674	0.008	4.49	0.29	0.9598	0.0002
Blank	1	4.371	0.149	1.910	0.098										
	2	4.295	0.148	1.580	0.089										
	3	4.300	0.148	1.905	0.098	4.322	0.0425	1.798	0.1886						



$a_{Sr}$	$u_{aSr}$
33.2	2.1
31.7	2.1
29.5	2.1
<b>31.5</b>	<b>2.1</b>