

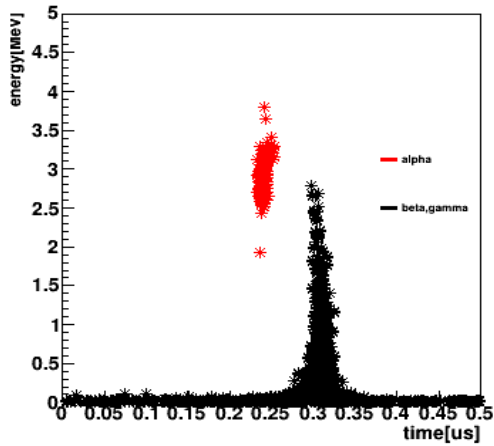
COSINE Lab Meeting

2019/01/28
Jae Jin Choi

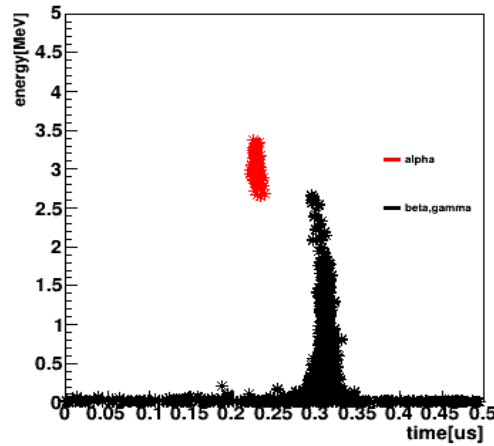


Alpha Monitoring

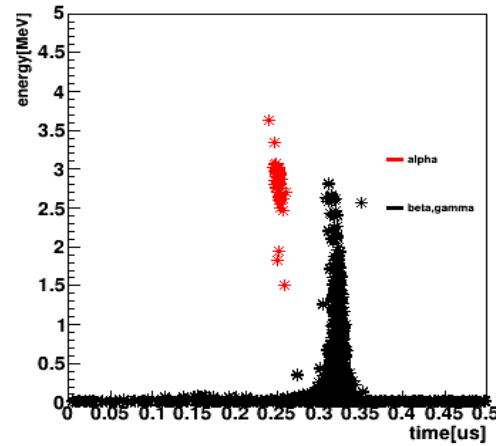
crystal1 alpha cut



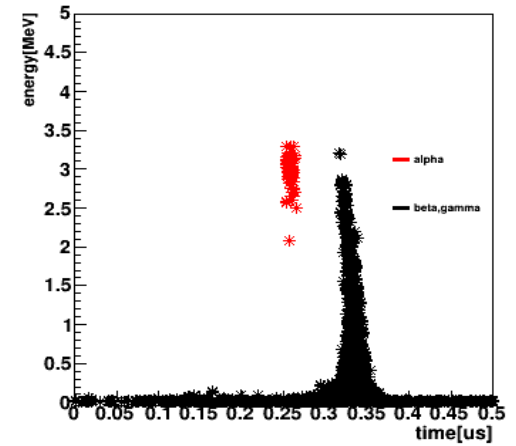
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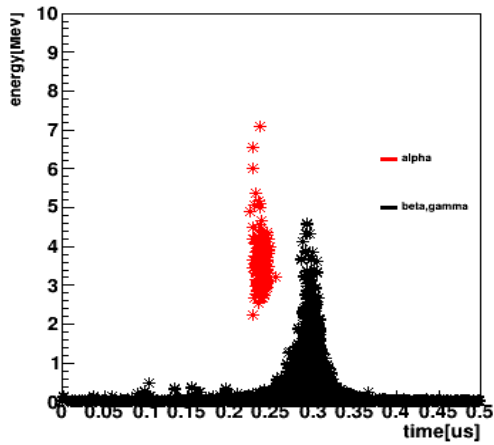
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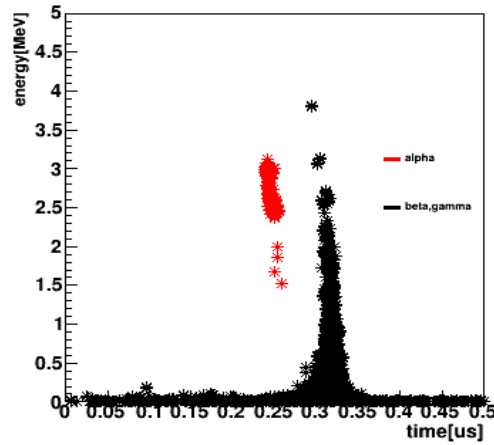
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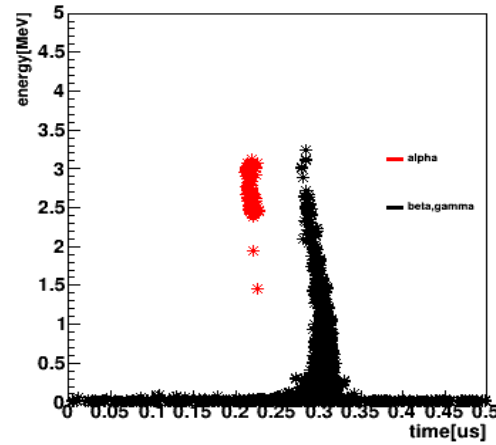
crystal5 alpha cut



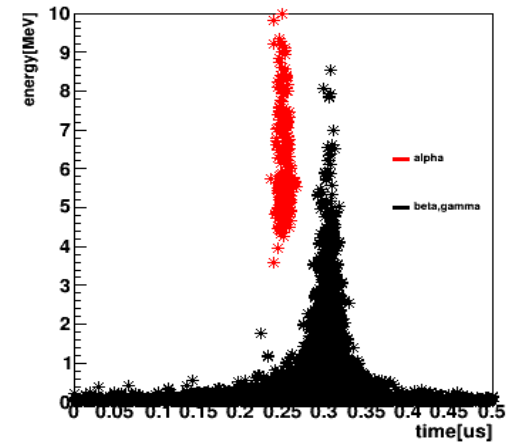
crystal6 alpha cut



crystal7 alpha cut



crystal8 alpha cut



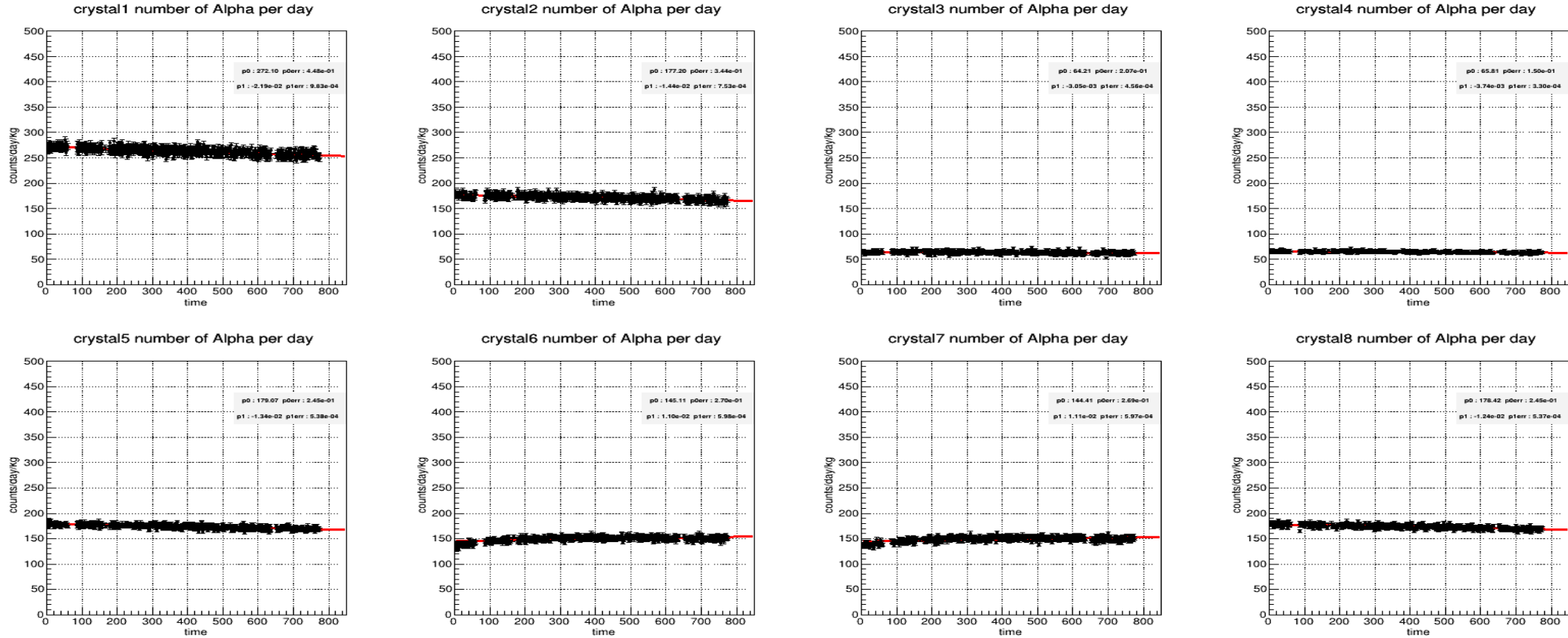
Meantime vs energyD

Alpha Monitoring

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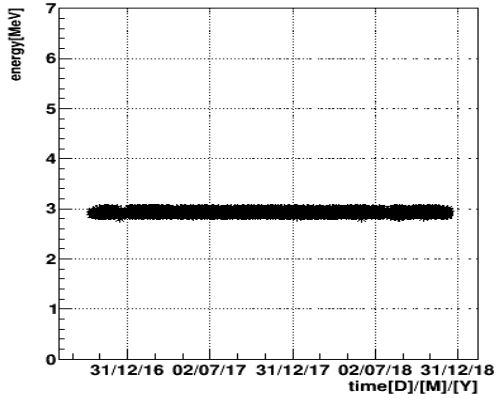
Alpha Monitoring



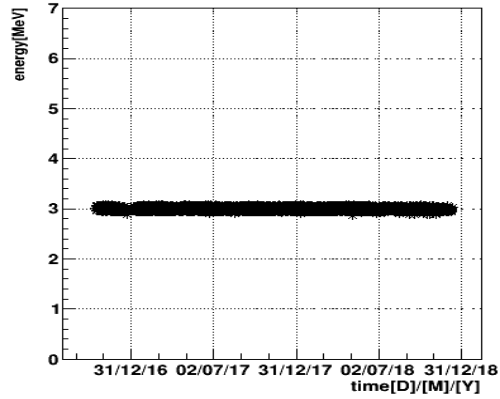
Time : counts/day/kg

Alpha Monitoring

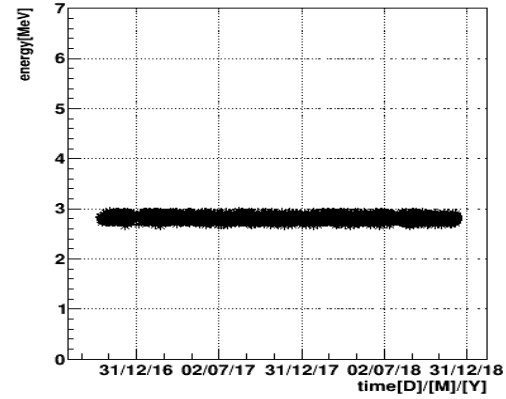
crystal1 energy mean value of alpha



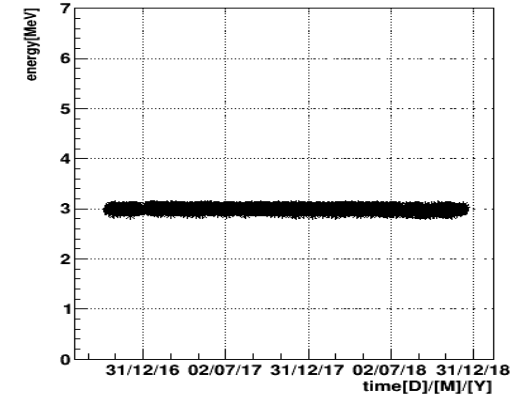
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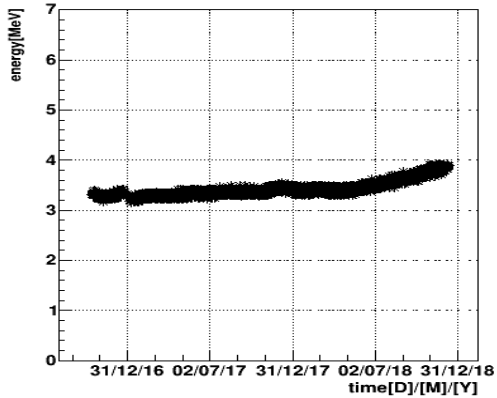
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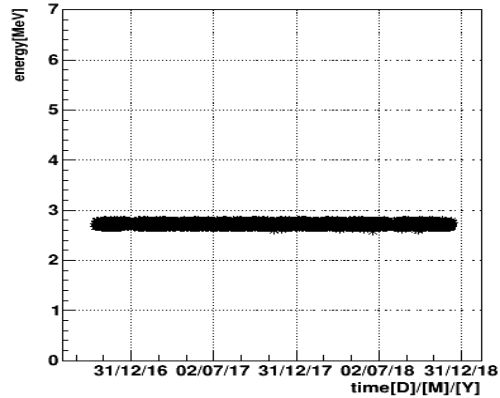
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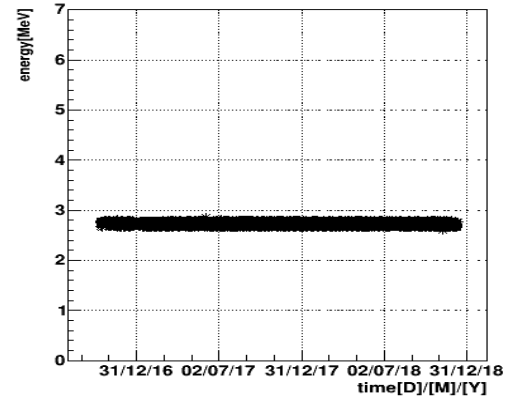
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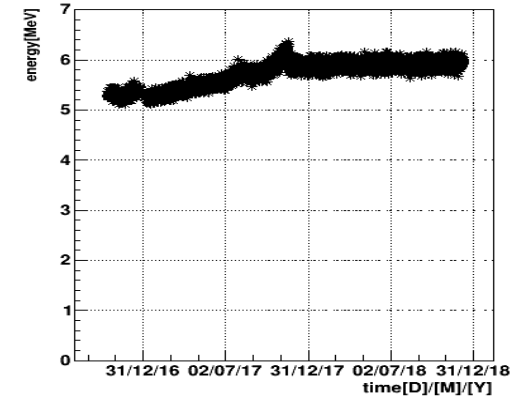
crystal6 energy mean value of alpha



crystal7 energy mean value of alpha

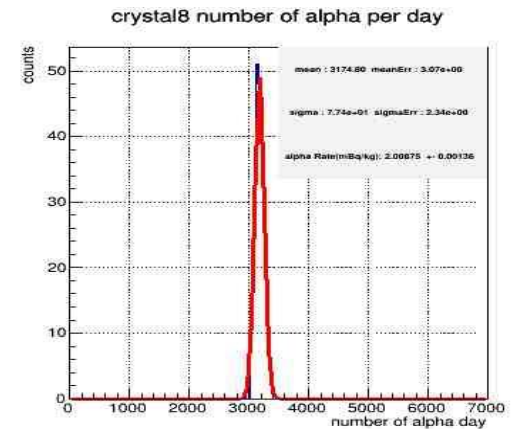
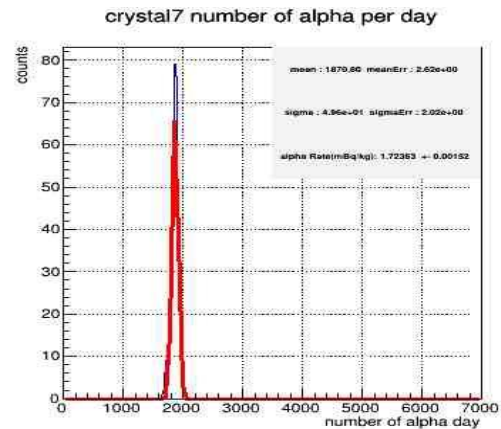
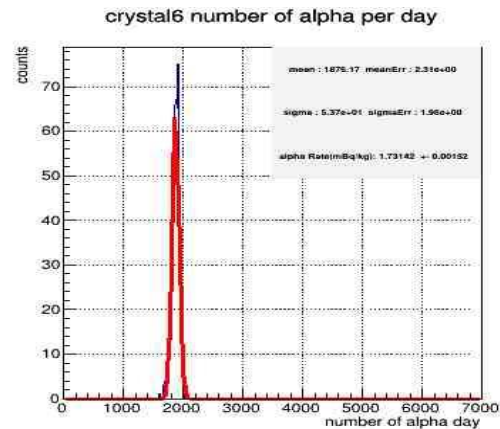
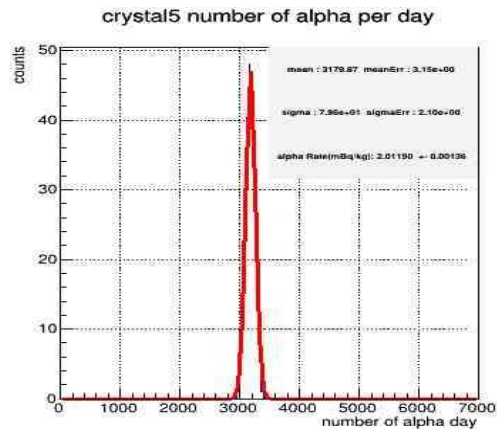
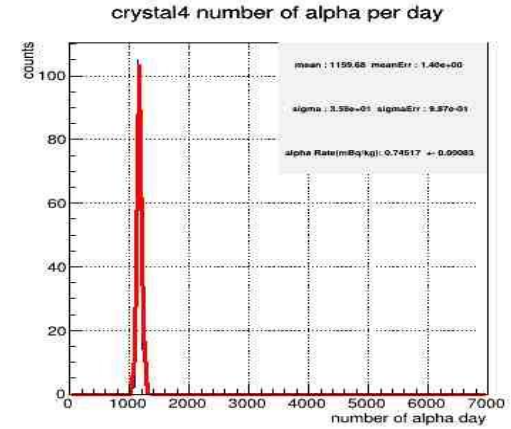
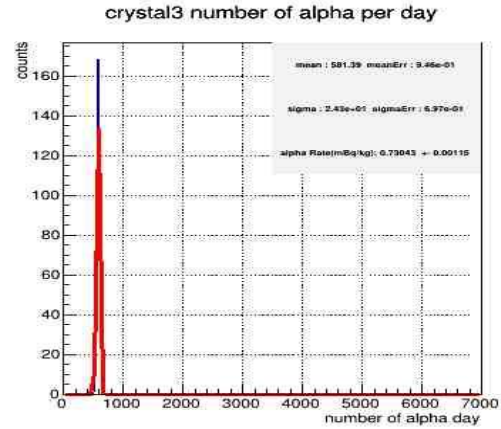
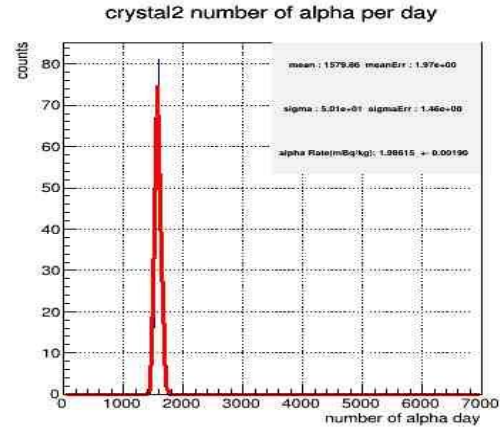
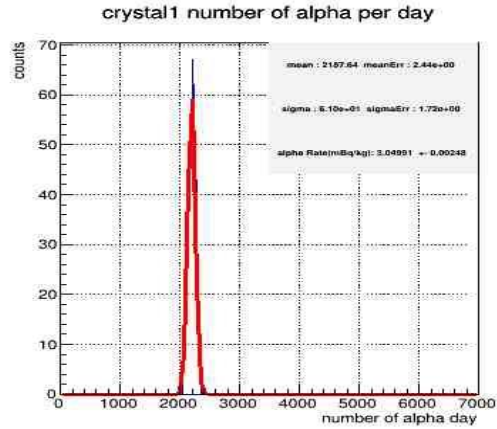


crystal8 energy mean value of alpha



Time : energy mean

Alpha Monitoring



Number of alpha/day : counts

Alpha Monitoring

Crystal	Alpha rate(Journal)[mBq/kg]	Alpha rate(1544~1858)[mBq/kg]
Crystal-1	3.20 ± 0.08	3.04991 ± 0.00248
Crystal-2	2.06 ± 0.06	1.98615 ± 0.00190
Crystal-3	0.76 ± 0.02	0.73042 ± 0.00115
Crystal-4	0.74 ± 0.02	0.74517 ± 0.00083
Crystal-5	2.06 ± 0.05	2.01190 ± 0.00135
Crystal-6	1.52 ± 0.04	1.73142 ± 0.00152
Crystal-7	1.54 ± 0.04	1.72363 ± 0.00151
Crystal-8	2.05 ± 0.05	2.00875 ± 0.00135

Reference : Initial performance of the COSINE-100 experiment