Distribuiçao angular



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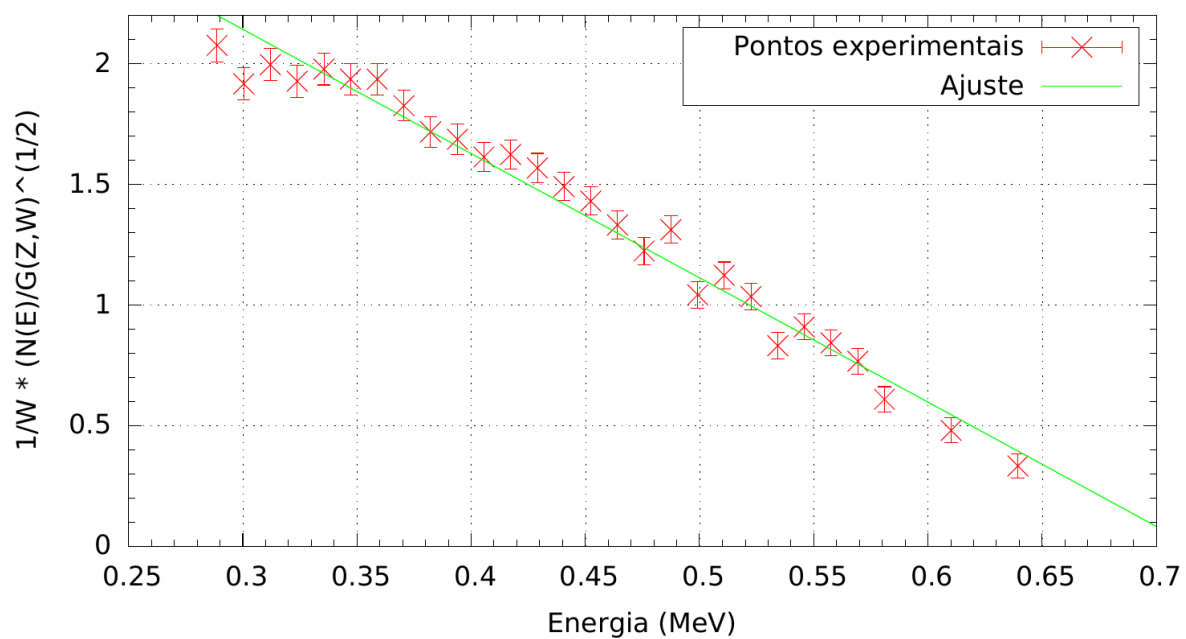
## Calibraçao Tensao-Canal
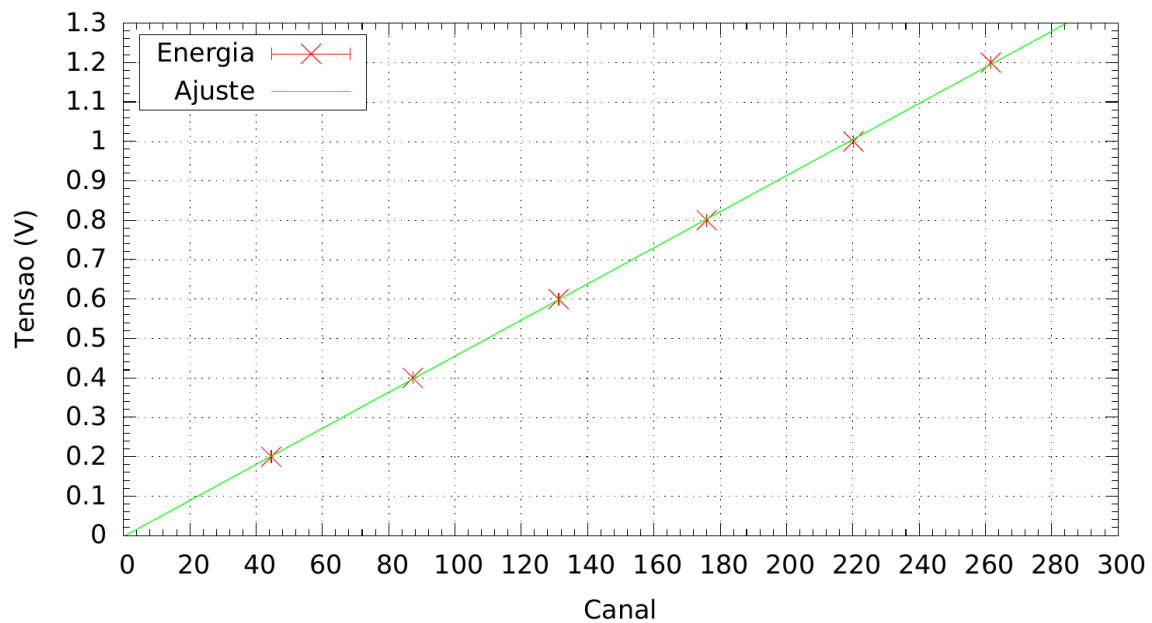


## Plot de Curie

Table 1:

| Tensão (V) | Canal | Contagens | Centróide | Contagens Totais |
|---|---|---|---|---|
| 0.2 | 43 | 32 | $44.59 \pm 0.02$ | $808 \pm 6$ |
| | 44 | 338 | | |
| | 45 | 397 | | |
| | 46 | 41 | | |
| 0.4 | 86 | 55 | $87.30 \pm 0.02$ | $808 \pm 7$ |
| | 87 | 471 | | |
| | 88 | 267 | | |
| | 89 | 15 | | |
| 0.6 | 130 | 26 | $131.25 \pm 0.03$ | $807 \pm 5$ |
| | 131 | 313 | | |
| | 132 | 407 | | |
| | 133 | 61 | | |
| 0.8 | 174 | 4 | $175.93 \pm 0.02$ | $806 \pm 2$ |
| | 175 | 180 | | |
| | 176 | 496 | | |
| | 177 | 126 | | |
| 1 | 219 | 85 | $220.21 \pm 0.02$ | $800 \pm 9$ |
| | 220 | 476 | | |
| | 221 | 239 | | |
| | 222 | 0 | | |
| 1.2 | 261 | 295 | $261.66 \pm 0.02$ | $952 \pm 17$ |
| | 262 | 491 | | |
| | 263 | 166 | | |
| | 264 | 0 | | |

Table 2:

| Pico | FWHM (Canal) | Área (Contagens) | Centróide (Canal) | Energia (keV) | Desv. em $\sigma$ |
|---|---|---|---|---|---|
| 480 keV | 1.72 | $7055 \pm 140$ | $103.91 \pm 0.01$ | $477.2 \pm 6.7$ | -0.42 |
| 554 keV | 2.19 | $1964 \pm 114$ | $119.67 \pm 0.02$ | $550.0 \pm 7.3$ | -0.54 |
| 974 keV | 1.91 | $2230 \pm 61$ | $210.84 \pm 0.02$ | $971.1 \pm 11.5$ | -0.25 |
| 1047 keV | 1.98 | $449 \pm 29$ | $226.73 \pm 0.04$ | $1044.5 \pm 12.3$ | -0.20 |

Table 3:

| Designação do Pico | FWHM (Canal) | Área(Contagens) | Centróide (Canal) |
|---|---|---|---|
| 620 keV | 7.3 | $39759 \pm 199$ | $106.68 \pm 0.02$ |

Table 4:

| Canal | Energia (keV) | Contagens | $\frac{1}{W}\left(\frac{N(E)}{G(Z,W)}\right)^{\frac{1}{2}}$ |
|---|---|---|---|
| 50 | $288.7 \pm 6.1$ | $242 \pm 16$ | $2.08 \pm 0.07$ |
| 52 | $300.4 \pm 6.2$ | $211 \pm 15$ | $1.92 \pm 0.07$ |
| 54 | $312.1 \pm 6.2$ | $234 \pm 15$ | $2.00 \pm 0.07$ |
| 56 | $323.8 \pm 6.3$ | $223 \pm 15$ | $1.93 \pm 0.07$ |
| 58 | $335.5 \pm 6.4$ | $240 \pm 15$ | $1.98 \pm 0.07$ |
| 60 | $347.2 \pm 6.5$ | $235 \pm 15$ | $1.94 \pm 0.06$ |
| 62 | $358.9 \pm 6.5$ | $240 \pm 15$ | $1.94 \pm 0.06$ |
| 64 | $370.6 \pm 6.6$ | $218 \pm 15$ | $1.83 \pm 0.06$ |
| 66 | $382.3 \pm 6.7$ | $197 \pm 14$ | $1.72 \pm 0.06$ |
| 68 | $393.9 \pm 6.8$ | $194 \pm 14$ | $1.69 \pm 0.06$ |
| 70 | $405.6 \pm 6.9$ | $181 \pm 13$ | $1.61 \pm 0.06$ |
| 72 | $417.3 \pm 6.9$ | $187 \pm 14$ | $1.62 \pm 0.06$ |
| 74 | $429.0 \pm 7.0$ | $178 \pm 13$ | $1.57 \pm 0.06$ |
| 76 | $440.7 \pm 7.1$ | $164 \pm 13$ | $1.49 \pm 0.06$ |
| 78 | $452.4 \pm 7.2$ | $154 \pm 12$ | $1.43 \pm 0.06$ |
| 80 | $464.1 \pm 7.3$ | $136 \pm 12$ | $1.33 \pm 0.06$ |
| 82 | $475.8 \pm 7.4$ | $117 \pm 11$ | $1.22 \pm 0.06$ |
| 84 | $487.5 \pm 7.5$ | $137 \pm 12$ | $1.31 \pm 0.06$ |
| 86 | $499.1 \pm 7.6$ | $88 \pm 9$ | $1.04 \pm 0.06$ |
| 88 | $510.8 \pm 7.7$ | $104 \pm 10$ | $1.12 \pm 0.06$ |
| 90 | $522.5 \pm 7.8$ | $90 \pm 9$ | $1.03 \pm 0.06$ |
| 92 | $534.2 \pm 7.9$ | $59 \pm 8$ | $0.83 \pm 0.05$ |
| 94 | $545.9 \pm 8.0$ | $72 \pm 8$ | $0.91 \pm 0.05$ |
| 96 | $557.6 \pm 8.1$ | $63 \pm 8$ | $0.84 \pm 0.05$ |
| 98 | $569.3 \pm 8.2$ | $53 \pm 7$ | $0.77 \pm 0.05$ |
| 100 | $581.0 \pm 8.3$ | $34 \pm 6$ | $0.61 \pm 0.05$ |
| 105 | $610.2 \pm 8.5$ | $22 \pm 5$ | $0.48 \pm 0.05$ |
| 110 | $639.4 \pm 8.8$ | $11 \pm 3$ | $0.33 \pm 0.05$ |

| Pico | Centróide | FWHM | ROI NET | ROI INT | Limite | de Canal | Limite | de Tensão (V) | Corr. Ruído ($\xi$) |
|---|---|---|---|---|---|---|---|---|---|
| A – 511 keV | $298.58 \pm 0.06$ | 25.84 | $30641 \pm 348$ | $37173 \pm 193$ | 260 | 336 | 2.3 | 2.84 | $0.82 \pm 0.01$ |
| A – 1274 keV | $704.28 \pm 0.24$ | 44.48 | $6072 \pm 197$ | $7524 \pm 87$ | – | – | – | – | – |
| B – 511 keV | $261.65 \pm 0.02$ | 23.41 | $340484 \pm 1106$ | $410146 \pm 640$ | 224 | 292 | 1.96 | 2.34 | $0.83 \pm 0$ |
| B – 1274 keV | $617.29 \pm 0.07$ | 40.17 | $60762 \pm 572$ | $76410 \pm 276$ | – | – | – | – | – |

| $\theta$ (°) | $t_{aquisicao}$ (s) | $C_1$ | $C_2$ | $C_3$ | $R_{c_1 corr.}$ (s$^{-1}$) | $R_{c_2 corr.}$ (s$^{-1}$) | $R_{c_3 corr.}$ (s$^{-1}$) |
|---|---|---|---|---|---|---|---|
| -20 | 120 | $14942 \pm 122$ | $13664 \pm 117$ | $148 \pm 12$ | $102.64 \pm 1.53$ | $94.53 \pm 0.88$ | $1.06 \pm 0.10$ |
| -15 | 90 | $11185 \pm 106$ | $10271 \pm 101$ | $727 \pm 27$ | $102.44 \pm 1.60$ | $94.74 \pm 1.00$ | $7.91 \pm 0.30$ |
| -12 | 60 | $7448 \pm 86$ | $6802 \pm 82$ | $831 \pm 29$ | $102.32 \pm 1.74$ | $94.11 \pm 1.19$ | $13.68 \pm 0.48$ |
| -10 | 30 | $3789 \pm 62$ | $3678 \pm 61$ | $658 \pm 26$ | $104.11 \pm 2.13$ | $101.78 \pm 1.72$ | $21.75 \pm 0.86$ |
| -9 | 30 | $3659 \pm 60$ | $3582 \pm 60$ | $729 \pm 27$ | $100.53 \pm 2.08$ | $99.12 \pm 1.69$ | $24.13 \pm 0.90$ |
| -8 | 30 | $3760 \pm 61$ | $3647 \pm 60$ | $811 \pm 28$ | $103.31 \pm 2.12$ | $100.92 \pm 1.71$ | $26.85 \pm 0.95$ |
| -7 | 30 | $3843 \pm 62$ | $3372 \pm 58$ | $830 \pm 29$ | $105.59 \pm 2.15$ | $93.31 \pm 1.64$ | $27.49 \pm 0.96$ |
| -6 | 30 | $3680 \pm 61$ | $3411 \pm 58$ | $905 \pm 30$ | $101.11 \pm 2.09$ | $94.39 \pm 1.65$ | $30.00 \pm 1.00$ |
| -5 | 30 | $3594 \pm 60$ | $3217 \pm 57$ | $961 \pm 31$ | $98.75 \pm 2.06$ | $89.02 \pm 1.60$ | $31.88 \pm 1.03$ |
| -4 | 30 | $3600 \pm 60$ | $3354 \pm 58$ | $995 \pm 32$ | $98.91 \pm 2.06$ | $92.81 \pm 1.64$ | $33.01 \pm 1.05$ |
| -3 | 30 | $3764 \pm 61$ | $3417 \pm 58$ | $1146 \pm 34$ | $103.42 \pm 2.12$ | $94.55 \pm 1.65$ | $38.03 \pm 1.13$ |
| -2 | 30 | $3680 \pm 61$ | $3560 \pm 60$ | $1243 \pm 35$ | $101.11 \pm 2.09$ | $98.51 \pm 1.69$ | $41.26 \pm 1.18$ |
| -1 | 30 | $3630 \pm 60$ | $3404 \pm 58$ | $1199 \pm 35$ | $99.74 \pm 2.07$ | $94.19 \pm 1.65$ | $39.80 \pm 1.15$ |
| 0 | 30 | $3685 \pm 61$ | $3364 \pm 58$ | $1175 \pm 34$ | $101.25 \pm 2.09$ | $93.09 \pm 1.64$ | $39.00 \pm 1.14$ |
| 1 | 30 | $3617 \pm 60$ | $3323 \pm 58$ | $1115 \pm 33$ | $99.38 \pm 2.07$ | $91.95 \pm 1.63$ | $37.01 \pm 1.11$ |
| 2 | 30 | $3803 \pm 62$ | $3343 \pm 58$ | $1063 \pm 33$ | $104.49 \pm 2.14$ | $92.51 \pm 1.63$ | $35.26 \pm 1.09$ |
| 3 | 30 | $3599 \pm 60$ | $3322 \pm 58$ | $981 \pm 31$ | $98.89 \pm 2.06$ | $91.93 \pm 1.63$ | $32.54 \pm 1.04$ |
| 4 | 30 | $3661 \pm 61$ | $3326 \pm 58$ | $895 \pm 30$ | $100.59 \pm 2.08$ | $92.04 \pm 1.63$ | $29.67 \pm 1.00$ |
| 5 | 30 | $3725 \pm 61$ | $3564 \pm 60$ | $881 \pm 30$ | $102.35 \pm 2.11$ | $98.62 \pm 1.69$ | $29.19 \pm 0.99$ |
| 6 | 30 | $3677 \pm 61$ | $3355 \pm 58$ | $772 \pm 28$ | $101.03 \pm 2.09$ | $92.84 \pm 1.64$ | $25.57 \pm 0.93$ |
| 7 | 30 | $3754 \pm 61$ | $3347 \pm 58$ | $671 \pm 26$ | $103.15 \pm 2.12$ | $92.62 \pm 1.64$ | $22.20 \pm 0.86$ |
| 8 | 30 | $3693 \pm 61$ | $3447 \pm 59$ | $650 \pm 25$ | $101.47 \pm 2.10$ | $95.38 \pm 1.66$ | $21.50 \pm 0.85$ |
| 9 | 30 | $3641 \pm 60$ | $3271 \pm 57$ | $515 \pm 23$ | $100.04 \pm 2.08$ | $90.51 \pm 1.62$ | $17.01 \pm 0.76$ |
| 10 | 30 | $3637 \pm 60$ | $3345 \pm 58$ | $433 \pm 21$ | $99.93 \pm 2.07$ | $92.56 \pm 1.63$ | $14.27 \pm 0.69$ |
| 12 | 60 | $7375 \pm 86$ | $6548 \pm 81$ | $558 \pm 24$ | $101.32 \pm 1.73$ | $90.60 \pm 1.17$ | $9.14 \pm 0.39$ |
| 15 | 90 | $11059 \pm 105$ | $10049 \pm 100$ | $400 \pm 20$ | $101.29 \pm 1.59$ | $92.69 \pm 0.98$ | $4.28 \pm 0.22$ |
| 20 | 120 | $14704 \pm 121$ | $13274 \pm 115$ | $62 \pm 8$ | $101.00 \pm 1.51$ | $91.83 \pm 0.86$ | $0.35 \pm 0.07$ |

| 1º Momento | 2º Momento | 3º Momento | 4º Momento |
|---|---|---|---|
| -0.65 | 37.21 | 4.72 | 3584.16 |
| – | **Desvio Padrão** | **Assimetria** | **Kurtosis** |
| – | 6.10 | 0.021 | 2.59 |