

### Munkalap1

| Típus         | Adatfájl / Illesztés | Paraméterek forrása  | Megjegyzés         | Részecskék               |
|---------------|----------------------|----------------------|--------------------|--------------------------|
| Au+Au 200GeV  | VAN / VAN            | 1104.1188            | pt.spektrum+HBT    | pi, K, p                 |
| Au+Au 130GeV  | KÉP / VAN            | PhysRvLett.88.242301 | pt.spektrum+HBT    | pi, K, p                 |
| Pb+Pb 158GeV  | KÉP / VAN            | 9907.338             | mt.spektrum+HBT    | pip, Kp, p               |
| Au+Au 62.4GeV | KÉP / NINCS          | id:p1142, id:p0595   | pt.spektrum+v2+HBT | pi, K, p                 |
| Au+Au 39GeV   | KÉP / NINCS          | id:p1141, id:1107    | pt.spektrumv2      | pi0 spektrum, töltött v2 |
| Cu+Cu 62.4GeV | KÉP / NINCS          | id:p0602, id:p0458   | pt.spektrum+v2     | pi0 (v2), pi, K, p       |
| Cu+Cu 22.5GeV | KÉP / NINCS          | id:p0457             | pt.spektrum        | pi, K, p csak töltött    |

[http://www.phenix.bnl.gov/WWW/plots/find\\_plots.php](http://www.phenix.bnl.gov/WWW/plots/find_plots.php)

| Buda-Lund parameters | Au+Au 200 GeV central (0-30%) | Au+Au 200 GeV non-central (20-30%) |
|----------------------|-------------------------------|------------------------------------|
| T0 [MeV]             | $196 \pm 13$                  | $174 \pm 6$                        |
| Te [MeV]             | $117 \pm 11$                  | $130 \pm 6$                        |
| $\mu_B$ [MeV]        | $31 \pm 28$                   | $27 \pm 16$                        |
| Rx [fm]              | $13.5 \pm 1.7$                | $9.5 \pm 0.5$                      |
| Ry [fm]              | $13.5 \pm 1.7$                | $7.0 \pm 0.2$                      |
| Rs <sub>x</sub> [fm] | $12.4 \pm 1.6$                | $12.8 \pm 0.8$                     |
| Rs <sub>y</sub> [fm] | $12.4 \pm 1.6$                | $16.9 \pm 1.6$                     |
| H <sub>x</sub>       | $0.119 \pm 0.020$             | $0.158 \pm 0.002$                  |
| H <sub>y</sub>       | $0.119 \pm 0.020$             | $0.118 \pm 0.002$                  |
| $\tau_0$ [fm/c]      | $5.8 \pm 0.3$                 | $5.4 \pm 0.1$                      |
| $\Delta\tau$ [fm/c]  | $0.9 \pm 1.2$                 | $2.5 \pm 0.2$                      |
| $\Delta\eta$         | $3.1 \pm 0.1$                 | $2.5 \pm 0.3$                      |
| $\chi^2 / NDF$       | $114/208 = 0.55$              | $269.4/152 = 1.77$                 |

| Buda-Lund parameter | Au+Au 200 GeV  | Au+Au 130 GeV  |
|---------------------|----------------|----------------|
| T0 [MeV]            | $196 \pm 13$   | $214 \pm 7$    |
| Te [MeV]            | $117 \pm 12$   | $102 \pm 11$   |
| $\mu_B$ [MeV]       | $61 \pm 52$    | $77 \pm 38$    |
| RG [fm]             | $13.5 \pm 1.7$ | $28.0 \pm 5.5$ |
| Rs [fm]             | $12.4 \pm 1.6$ | $8.6 \pm 0.4$  |
| $u't$               | $1.6 \pm 0.2$  | $1.0 \pm 0.1$  |
| $\tau_0$ [fm/c]     | $5.8 \pm 0.3$  | $6.0 \pm 0.2$  |
| $\Delta\tau$ [fm/c] | $0.9 \pm 1.2$  | $0.3 \pm 1.2$  |
| $\Delta\eta$        | $3.1 \pm 0.1$  | $2.4 \pm 0.1$  |
| $\chi^2 / NDF$      | $114 / 208$    | $158.2 / 180$  |

| Buda-Lund parameter          | NA49            | NA44            | WA98             | Averaged        |
|------------------------------|-----------------|-----------------|------------------|-----------------|
| T0 [MeV]                     | $134 \pm 3$     | $145 \pm 3$     | $139 \pm 5$      | $139 \pm 6$     |
| $ut$                         | $0.61 \pm 0.05$ | $0.57 \pm 0.12$ | $0.50 \pm 0.09$  | $0.55 \pm 0.06$ |
| RG [fm]                      | $7.3 \pm 0.3$   | $6.9 \pm 1.1$   | $6.9 \pm 0.4$    | $7.1 \pm 0.2$   |
| $\tau_0$ [fm/c]              | $6.1 \pm 0.2$   | $6.1 \pm 0.9$   | $5.2 \pm 0.3$    | $5.9 \pm 0.6$   |
| $\Delta\tau$ [fm/c]          | $2.8 \pm 0.4$   | $0.01 \pm 2.2$  | $2.0 \pm 1.9$    | $1.6 \pm 1.5$   |
| $\Delta\eta$                 | $2.1 \pm 0.2$   | $2.4 \pm 1.6$   | $1.7 \pm 0.1$    | $2.1 \pm 0.4$   |
| $\langle\Delta T/T\rangle_r$ | $0.07 \pm 0.02$ | $0.08 \pm 0.08$ | $0.01 \pm 0.02$  | $0.06 \pm 0.05$ |
| $\langle\Delta T/T\rangle_t$ | $0.16 \pm 0.05$ | $0.87 \pm 0.72$ | $0.74 \pm 0.08$  | $0.59 \pm 0.38$ |
| $\chi^2 / NDF$               | $163/98= 1.66$  | $63/71 = 0.89$  | $115/108 = 1.06$ | $1.20$          |