Eur. Phys. J. C (2023) 83:90
https://doi.org/10.1140/epjc/s10052-023-11234-2

THE EUROPEAN PHYSICAL JOURNAL C

Erratum

Erratum to: Measurements of $\pi^{\pm}$, $K^{\pm}$, p and $\bar{p}$ spectra in ^{7}Be+^{9}Be collisions at beam momenta from 19A to 150A GeV/c with the NA61/SHINE spectrometer at the CERN SPS

NA61/SHINE Collaboration

A. Acharya[9], H. Adhikary[9], A. Aduszkiewicz[15], K. K. Allison[25], E. V. Andronov[21], T. Antićić[3], V. Babkin[19], M. Baszczyk[13], S. Bhosale[10], A. Blondel[4], M. Bogomilov[2], A. Brandin[20], A. Bravar[23], W. Bryliński[17], J. Brzychczyk[12], M. Buryakov[19], O. Busygina[18], A. Bzdak[13], H. Cherif[6], M. Ćirković[22], M. Csanad[7], J. Cybowska[17], T. Czopowicz[9,17], A. Damyanova[23], N. Davis[10], M. Deliyergiyev[9], M. Deveaux[6], A. Dmitriev[19], W. Dominik[15], P. Dorosz[13], J. Dumarchez[4], R. Engel[5], G. A. Feofilov[21], L. Fields[24], Z. Fodor[7,16], A. Garibov[1], M. Gaździcki[6,9], O. Golosov[20], V. Golovatyuk[19], M. Golubeva[18], K. Grebieszkow[17], F. Guber[18], A. Haesler[23], S. N. Igolkin[21], S. Ilieva[2], A. Ivashkin[18], S. R. Johnson[25], K. Kadija[3], N. Kargin[20], E. Kashirin[20], M. Kiełbowicz[10], V. A. Kireyeu[19], V. Klochkov[6], V. I. Kolesnikov[19], D. Kolev[2], A. Korzenev[23], V. N. Kovalenko[21], S. Kowalski[14], M. Koziel[6], B. Kozłowski[17], A. Krasnoperov[19], W. Kucewicz[13], M. Kuich[15,a], A. Kurepin[18], D. Larsen[12], A. László[7], T. V. Lazareva[21], M. Lewicki[16], K. Łojek[12], V. V. Lyubushkin[19], M. Maćkowiak-Pawłowska[17], Z. Majka[12], B. Maksiak[11], A. I. Malakhov[19], A. Marcinek[10], A. D. Marino[25], K. Marton[7], H.-J. Mathes[5], T. Matulewicz[15], V. Matveev[19], G. L. Melkumov[19], A. O. Merzlaya[12], B. Messerly[26], Ł. Mik[13], S. Morozov[18,20], S. Mrówczyński[9], Y. Nagai[25], M. Naskręt[16], V. Ozvenchuk[10], V. Paolone[26], O. Petukhov[18], R. Płaneta[12], P. Podlaski[15], B. A. Popov[4,19], B. Porfy[7], M. Posiadała-Zezula[15], D. S. Prokhorova[21], D. Pszczel[11], S. Puławski[14], J. Puzović[22], M. Ravonel[23], R. Renfordt[6], D. Röhrich[8], E. Rondio[11], M. Roth[5], B. T. Rumberger[25], M. Rumyantsev[19], A. Rustamov[1,6], M. Rybczynski[9], A. Rybicki[10], S. Sadhu[9], A. Sadovsky[18], K. Schmidt[14], I. Selyuzhenkov[20], A. Yu. Seryakov[21], P. Seyboth[9], M. Słodkowski[17], P. Staszel[12], G. Stefanek[9], J. Stepaniak[11], M. Strikhanov[20], H. Ströbele[6], T. Šuša[3], A. Taranenko[20], A. Tefelska[17], D. Tefelski[17], V. Tereshchenko[19], A. Toia[6], R. Tsenov[2], L. Turko[16], R. Ulrich[5], M. Unger[5], D. Uzhva[21], F. F. Valiev[21], D. Veberič[5], V. V. Vechernin[21], A. Wickremasinghe[24,26], Z. Włodarczyk[9], K. Wojcik[14], O. Wyszyński[9], E. D. Zimmerman[25], R. Zwaska[24]

[1] National Nuclear Research Center, Baku, Azerbaijan
[2] Faculty of Physics, University of Sofia, Sofia, Bulgaria
[3] Ruđer Bošković Institute, Zagreb, Croatia
[4] LPNHE, University of Paris VI and VII, Paris, France
[5] Karlsruhe Institute of Technology, Karlsruhe, Germany
[6] University of Frankfurt, Frankfurt, Germany
[7] Wigner Research Centre for Physics of the Hungarian Academy of Sciences, Budapest, Hungary
[8] University of Bergen, Bergen, Norway
[9] Jan Kochanowski University in Kielce, Kielce, Poland
[10] Institute of Nuclear Physics, Polish Academy of Sciences, Kraków, Poland
[11] National Centre for Nuclear Research, Warsaw, Poland
[12] Jagiellonian University, Kraków, Poland
[13] AGH-University of Science and Technology, Kraków, Poland
[14] University of Silesia, Katowice, Poland
[15] University of Warsaw, Warsaw, Poland
[16] University of Wrocław, Wrocław, Poland
[17] Warsaw University of Technology, Warsaw, Poland
[18] Institute for Nuclear Research, Moscow, Russia
[19] Joint Institute for Nuclear Research, Dubna, Russia
[20] National Research Nuclear University (Moscow Engineering Physics Institute), Moscow, Russia
[21] St. Petersburg State University, St. Petersburg, Russia
[22] University of Belgrade, Belgrade, Serbia
[23] University of Geneva, Geneva, Switzerland
[24] Fermilab, Batavia, USA
[25] University of Colorado, Boulder, USA
[26] University of Pittsburgh, Pittsburgh, USA

Received: 7 January 2023 / Accepted: 16 January 2023 / Published online: 30 January 2023

Erratum to:Eur. Phys. J. C (2021) 81:73
https://doi.org/10.1140/epjc/s10052-020-08733-x

This Erratum replaces plots shown in Figs. 29, 30, 33 and 37, with the ones having corrected values. The corresponding entries in HEPData were also corrected. The arXiv and CERN CDS preprints were replaced by the corrected versions.

In Fig. 29 of the publication, the systematic uncertainty of the inverse slope parameter for negatively charged kaons was plotted using incorrect values, different ones than those given in Table 3. The plot with correct values is presented in Fig. 1.

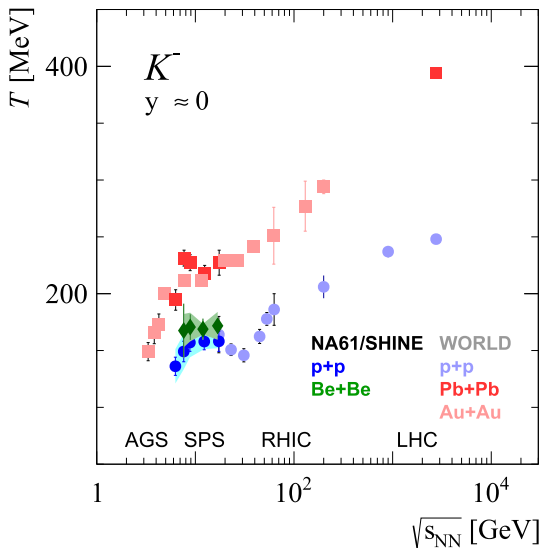

Fig. 1 The energy dependence of the inverse slope parameter of p_T spectra at mid-rapidity of negatively charged K mesons for *central* Be+Be, Pb+Pb and Au+Au collisions as well as inelastic p+p interactions. Both statistical (vertical bars) and systematic uncertainties (shaded bands) are shown

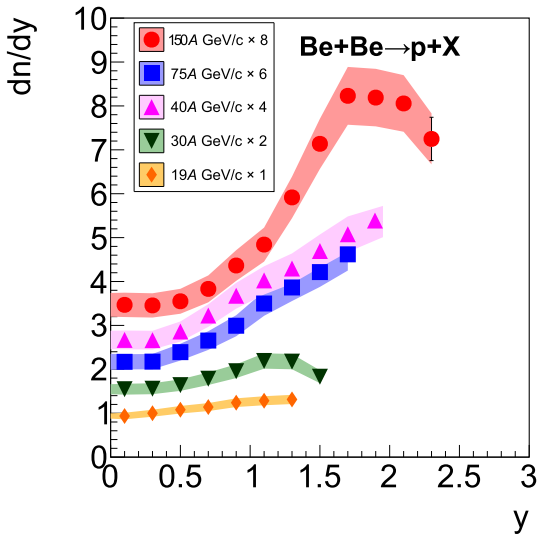

Fig. 2 Rapidity spectra of protons produced in the 20% most *central* Be+Be collisions. Curves depict Gaussian fits used to determine mean multiplicities. The following factors scaled spectra for different beam momenta for better visibility: 150A GeV/c by factor 8, 75A GeV/c by factor 6, 40A GeV/c by factor 4 and 30A GeV/c by factor 2

In Fig. 30 of the publication, the scaling factor for the rapidity spectrum of protons at 19A GeV/c given in the plot's legend was four. The correct factor is one. A plot with the corrected legend is presented in the Fig. 2.

In Figs. 33 and 37 of the publication, the values and uncertainties of the K/π ratio at mid-rapidity for positively and negatively charged particles in Be+Be collisions were plotted using incorrect values. Depending on the collision energy and particle charge, updated K/π values differ from the published ones by about 1-7%, while uncertainties up to a factor of 4. The correct plots are presented in Fig. 3, where the top plot replaces Fig. 33 (*left*) and the bottom plots replace Fig. 37.

The corrections included in the Erratum do not change the paper's conclusions.

The original article can be found online at https://doi.org/10.1140/epjc/s10052-020-08733-x.

[a] e-mail: mkuich@cern.ch

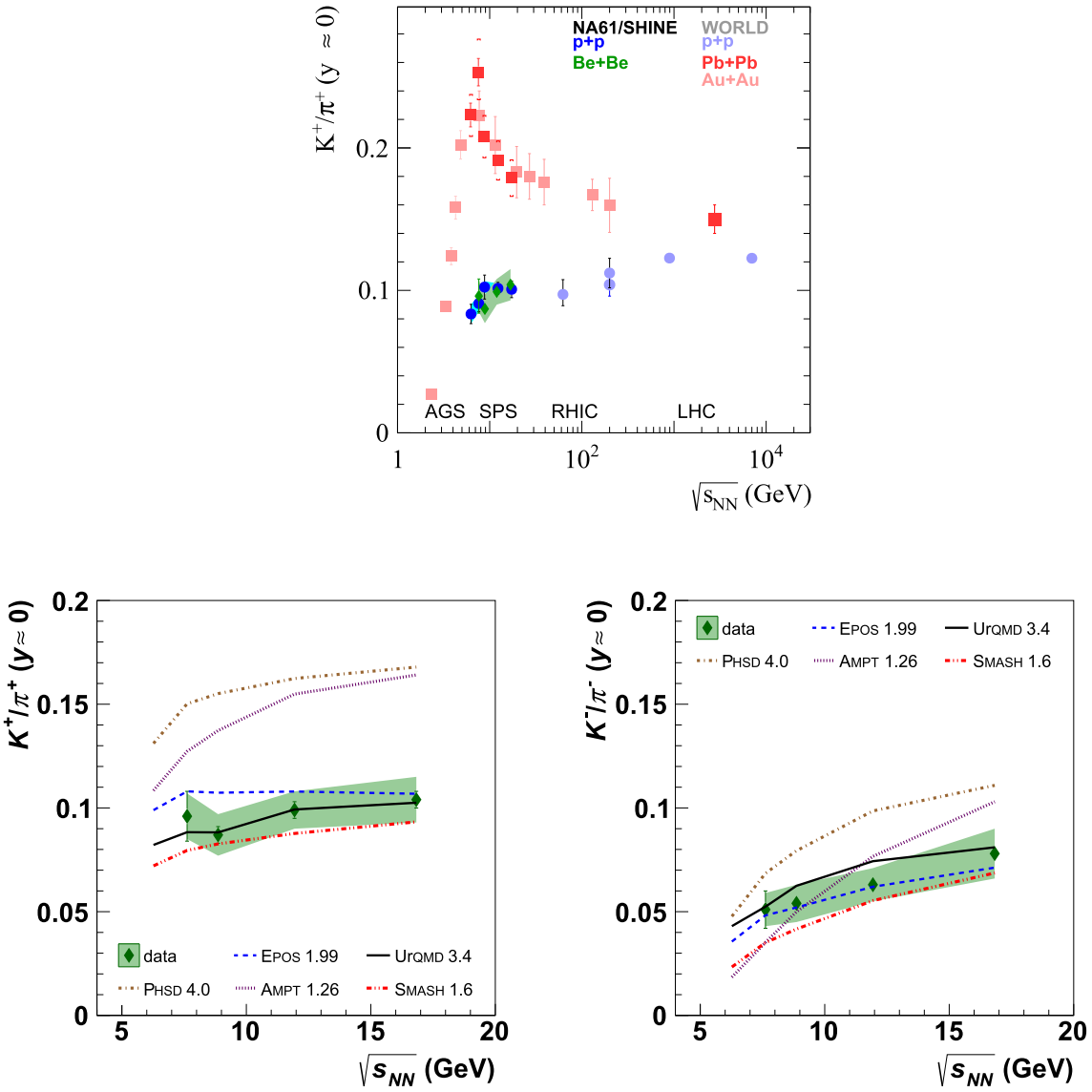

Fig. 3 *Top*: The energy dependence of the K^+/π^+ particle yields ratio at mid-rapidity for the 20% most *central* Be+Be, central Pb+Pb and Au+Au collisions, as well as inelastic p+p interactions. Both statistical (vertical bars) and systematic uncertainties (shaded bands) are shown. *Bottom*: Comparison of the energy dependence of K^+/π^+ (*left*) and K^-/π^- (*right*) yields ratio at mid-rapidity for the 20% most *central* Be+Be collisions with models: EPOS 1.99 (blue dashed line), URQMD 3.4 (black solid line), AMPT 1.26 (violet dotted line), PHSD 4.0 (brown dashed-dotted line) and SMASH 1.6 (red dashed-double dotted line)

Acknowledgements We would like to thank the CERN EP, BE, HSE and EN Departments for the strong support of NA61/SHINE. This work was supported by the Hungarian Scientific Research Fund (grant NKFIH 123842/123959), the Polish Ministry of Science and Higher Education (grants 667/N-CERN/2010/0, NN 202 48 4339, NN 202 23 1837 and DIR/WK/2016/2017/10-1), the National Science Centre Poland (grants 2014/14/E/ST2/00018, 2014/15/B/ST2 / 02537 and 2015/18/M/ST2/00125, 2015/19/N/ST2 /01689, 2016/23/B/ST2/00692, 2017/ 25/N/ ST2/ 02575, 2018/30/A/ST2/00226, 2018/31/G/ST2/03910), the Russian Science Foundation, grant 16-12-10176 and 17-72-20045, the Russian Academy of Science and the Russian Foundation for Basic Research (grants 08-02-00018, 09-02-00664 and 12-02-91503-CERN), the Russian Foundation for Basic Research (RFBR) funding within the research project no. 18-02-40086, the National Research Nuclear University MEPhI in the framework of the Russian Academic Excellence Project (contract No. 02.a03.21.0005, 27.08.2013), the Ministry of Science and Higher Education of the Russian Federation, Project "Fundamental properties of elementary particles and cosmology" No 0723-2020-0041, the European Union's Horizon 2020 research and innovation programme under grant agreement No. 871072, the Ministry of Education, Culture, Sports, Science and Technology, Japan, Grant-in-Aid for Scientific Research (grants 18071005, 19034011, 19740162, 20740160 and 20039012), the German Research Foundation (grant GA 1480/8-1), the Bulgarian Nuclear Regulatory Agency and the Joint Institute for Nuclear Research, Dubna (bilateral contract No. 4799-1-18/20), Bulgarian National Science Fund (grant DN08/11), Ministry of Education and Science of the Republic of Serbia (grant OI171002), Swiss Nationalfonds Founda-

tion (grant 200020117913/1), ETH Research Grant TH-01 07-3 and the Fermi National Accelerator Laboratory (Fermilab), a U.S. Department of Energy, Office of Science, HEP User Facility managed by Fermi Research Alliance, LLC (FRA), acting under Contract No. DE-AC02-07CH11359 and the IN2P3-CNRS (France).

Funded by SCOAP^3. SCOAP^3 supports the goals of the International Year of Basic Sciences for Sustainable Development.