

## Erratum to: A study of vorticity formation in high energy nuclear collisions

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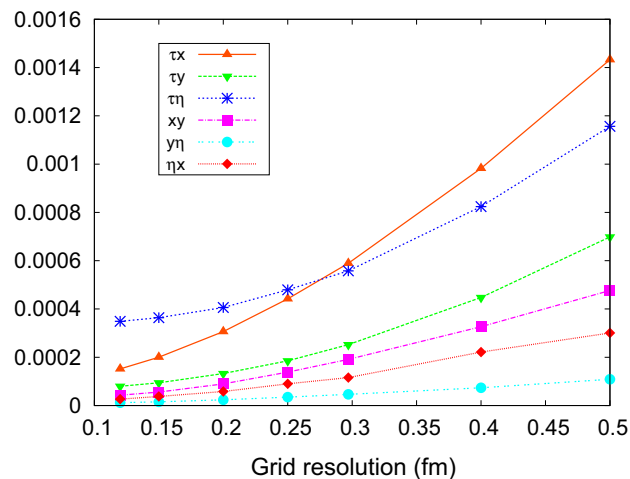
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### Erratum to: Eur. Phys. J. C (2015) 75:406

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Due to an oversight of ours in proofreading and a communication problem with the publisher, the figures published in F. Becattini et al. Eur. Phys. J. C (2015) 75:406 were not correct. This Erratum contains the correct figures (Figs. 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15) as in [arXiv:1501.04468](https://arxiv.org/abs/1501.04468)

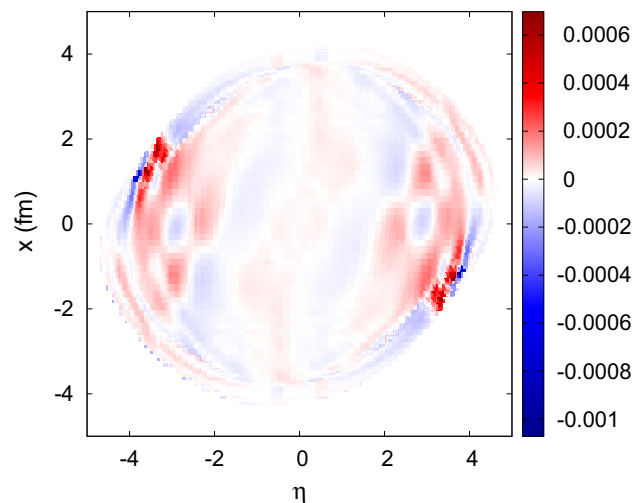


**Fig. 2** Mean of the absolute value of T-vorticity components, divided by  $T^2$ , at the freeze-out as a function of the grid resolution

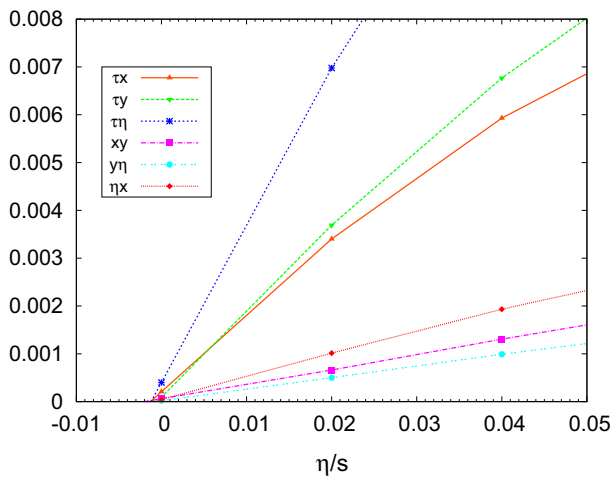
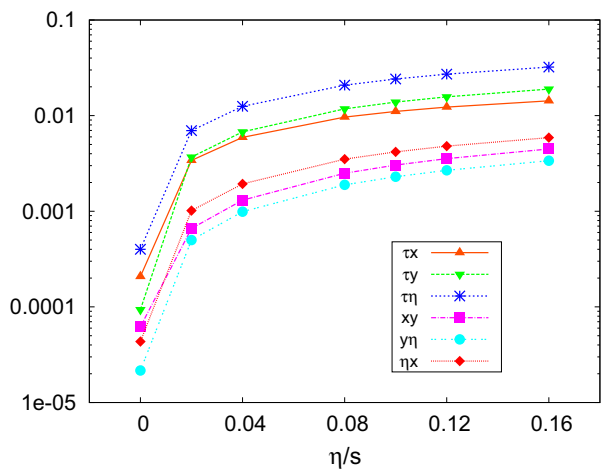
The original article can be found online at <https://doi.org/10.1140/epjc/s10052-015-3624-1>.

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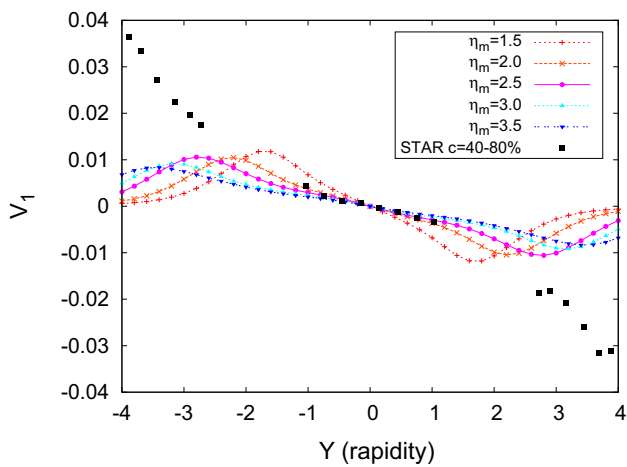
[v2], submitted on March 12 2015, and the post-publication version [arXiv:1501.04468](https://arxiv.org/abs/1501.04468) [v3], submitted on August 17 2015.



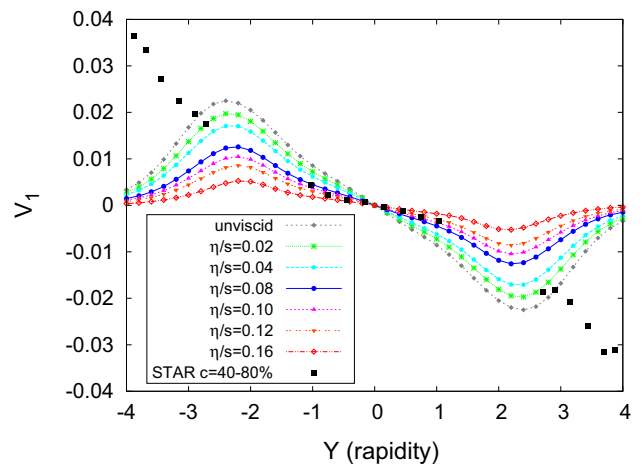
**Fig. 3** Contour plot of  $\Omega_{x\eta}/\tau T^2$  at the freeze-out hypersurface at  $y = 0$



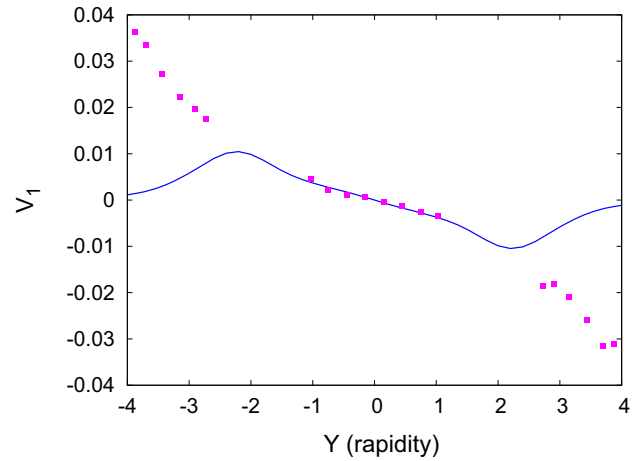
**Fig. 5** Mean of the absolute values of  $\Omega_{\mu\nu}/T^2$  components at the freeze-out hypersurface as a function of  $\eta/s$ . Note that the  $\Omega_{x\eta}, \Omega_{y\eta}, \Omega_{\tau\eta}$  have been multiplied by  $1/\tau$ . Upper panel: log scale. Lower panel: magnification of the region around zero viscosity



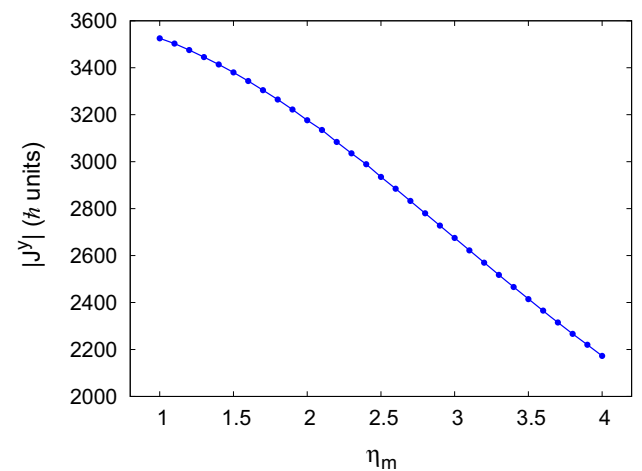
**Fig. 6** Directed flow of pions for different values of  $\eta_m$  parameter with  $\eta/s = 0.1$  compared with STAR data [1]



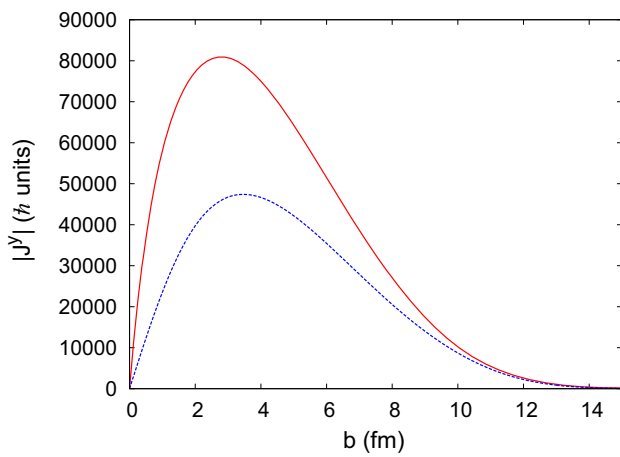
**Fig. 7** Directed flow of pions for different values of  $\eta/s$  with  $\eta_m = 2.0$  compared with STAR data [1]



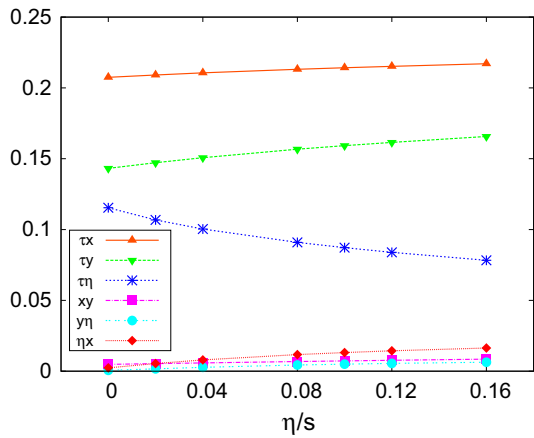
**Fig. 8** Directed flow of pions at  $\eta/s = 0.1$  and  $\eta_m = 2.0$  compared with STAR data [1]



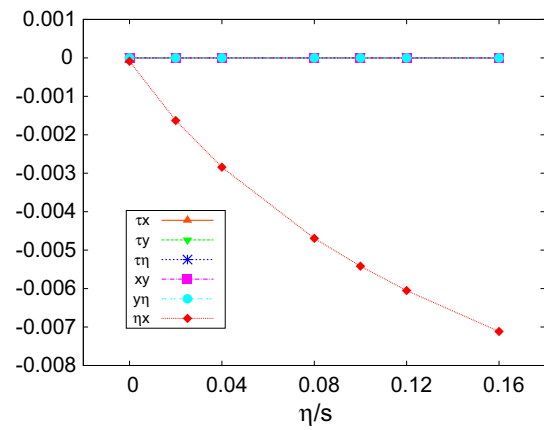
**Fig. 9** Angular momentum (in  $\hbar$  units) of the plasma with Bjorken initial conditions as a function of the parameter  $\eta_m$



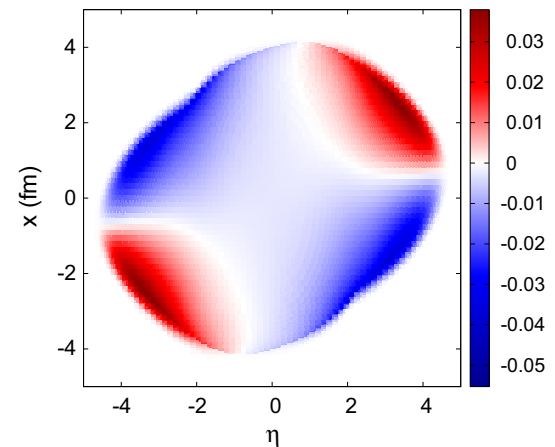
**Fig. 10** Estimated angular momentum (in  $\hbar$  units) of the overlap region of the two colliding nuclei (solid line) and total angular momentum of the plasma according to the parametrization of the initial conditions (dashed line), as a function of the impact parameter



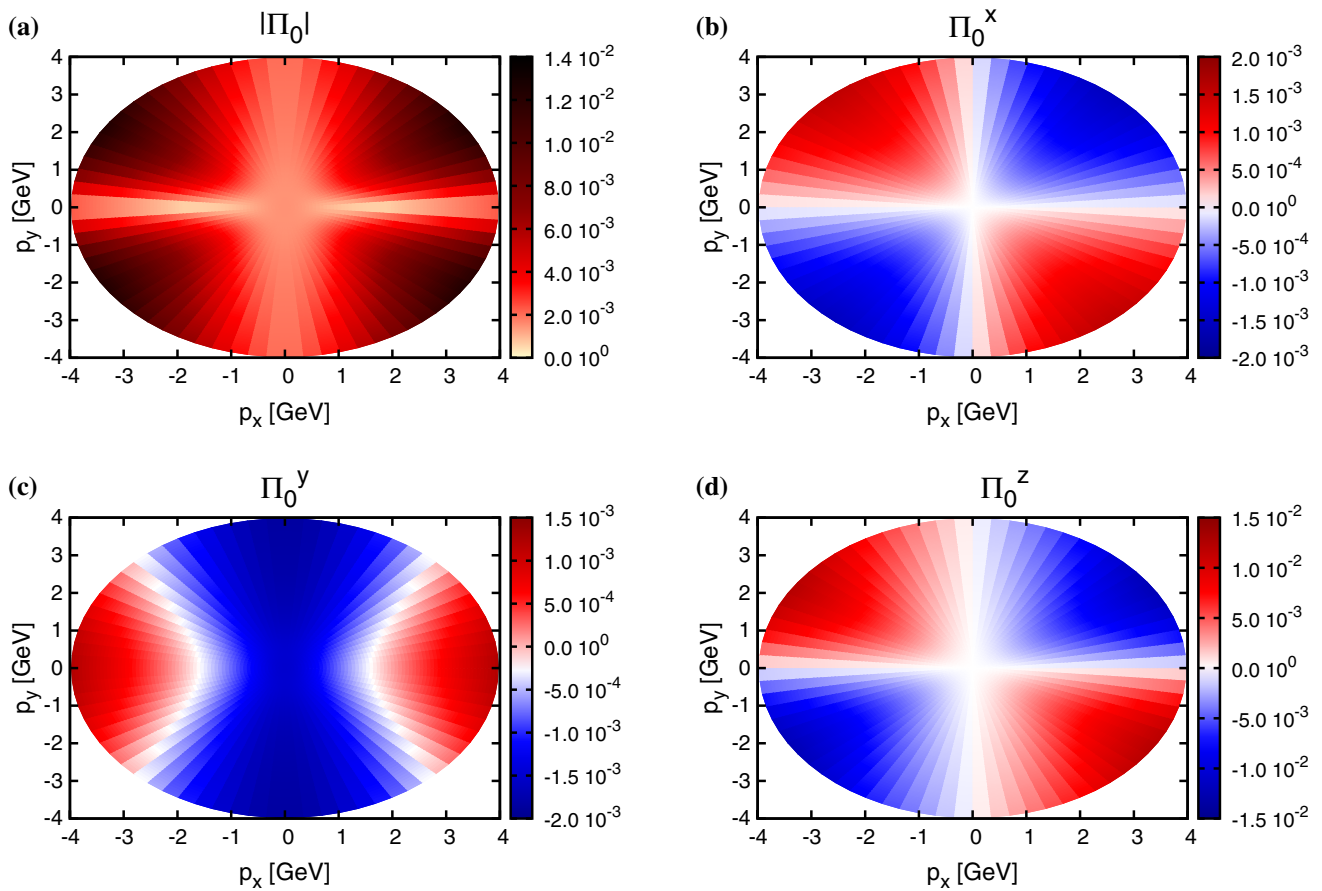
**Fig. 11** Mean of the absolute value of thermal vorticity covariant components at the freeze-out as a function of  $\eta/s$ . Note that the  $\varpi_{x\eta}$ ,  $\varpi_{y\eta}$ ,  $\varpi_{\tau\eta}$  have been multiplied by  $1/\tau$



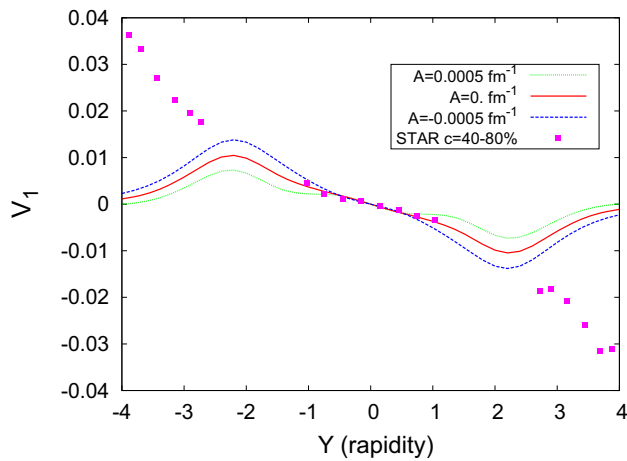
**Fig. 12** Mean values of thermal vorticity components at the freeze-out as a function of  $\eta/s$ . Note that the  $\varpi_{x\eta}$ ,  $\varpi_{y\eta}$ ,  $\varpi_{\tau\eta}$  have been multiplied by  $1/\tau$



**Fig. 13** Contour plot of  $1/\tau$ -scaled  $\eta x$  covariant component of the thermal vorticity,  $\varpi_{\eta x}/\tau$  over the freeze-out hypersurface for  $y = 0$ ,  $\eta/s = 0.1$ ,  $\eta_m = 2.0$



**Fig. 14** Magnitude (a) and components (b–d) of the polarization vector of the  $\Lambda$  hyperon in its rest frame



**Fig. 15** Directed flow of pions at  $\eta/s = 0.1$  and  $\eta_m = 2.0$  and with initial  $u^\eta = \frac{1}{\tau} \tanh Ax \sinh(y_{\text{beam}} - |\eta|)$  as in the eq. (36) of the amended paper (Eur. Phys. J. C (2015) 75:406) compared with STAR data [1]

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**Reference**

1. B.I. Abelev et al. (STAR Collaboration), Phys. Rev. Lett. **101**, 252301 (2008)