



Corrigendum

Corrigendum to “Odd and even partial waves of $\eta\pi^-$ and $\eta'\pi^-$ in $\pi^-p \rightarrow \eta^{(\prime)}\pi^-p$ at 191 GeV/c” [Phys. Lett. B 740 (2015) 303–311]

C. Adolph^h, R. Akhunzyanov^g, M.G. Alexeev^{aa}, G.D. Alexeev^g, A. Amoroso^{aa,ac}, V. Andrieux^v, V. Anosov^g, A. Austregesilo^{j,q}, B. Badełek^{ae}, F. Balestra^{aa,ac}, J. Barth^d, G. Baum^a, R. Beck^c, Y. Bedfer^v, A. Berlin^b, J. Bernhard^m, K. Bicker^{j,q}, E.R. Bielert^j, J. Bieling^d, R. Birsan^y, J. Bisplinghoff^c, M. Bodlak^s, M. Boer^v, P. Bordalo^{l,1}, F. Bradamante^{x,y}, C. Braun^h, A. Bressan^{x,y,*}, M. Bücheleⁱ, E. Burtin^v, L. Capozza^v, M. Chiosso^{aa,ac}, S.U. Chung^{q,2}, A. Cicuttin^{z,y}, M.L. Crespo^{z,y}, Q. Curiel^v, S. Dalla Torre^y, S.S. Dasgupta^f, S. Dasgupta^y, O.Yu. Denisov^{ac}, S.V. Donskov^u, N. Doshita^{ag}, V. Duic^x, W. Dünnweber^p, M. Dziewiecki^{af}, A. Efremov^g, C. Elia^{x,y}, P.D. Eversheim^c, W. Eyrich^h, M. Faessler^p, A. Ferrero^v, M. Finger^s, M. Finger jr.^s, H. Fischerⁱ, C. Franco^l, N. du Fresne von Hohenesche^{m,j}, J.M. Friedrich^q, V. Frolov^j, F. Gautheron^b, O.P. Gavrichtchouk^g, S. Gerassimov^{o,q}, R. Geyer^p, I. Gnesi^{aa,ac}, B. Gobbo^y, S. Goertz^d, M. Gorzellikⁱ, S. Grabmüller^q, A. Grasso^{aa,ac}, B. Grube^q, T. Grussenmeyerⁱ, A. Guskov^g, F. Haas^q, D. von Harrach^m, D. Hahne^d, R. Hashimoto^{ag}, F.H. Heinsiusⁱ, F. Herrmannⁱ, F. Hinterberger^c, Ch. Höppner^q, N. Horikawa^{r,4}, N. d'Hose^v, S. Huber^q, S. Ishimoto^{ag,5}, A. Ivanov^g, Yu. Ivanshin^g, T. Iwata^{ag}, R. Jahn^c, V. Jary^t, P. Jasinski^m, P. Jörgⁱ, R. Joosten^c, E. Kabuß^m, B. Ketzer^{q,6}, G.V. Khaustov^u, Yu.A. Khokhlov^{u,7}, Yu. Kisseelev^g, F. Klein^d, K. Klimaszewski^{ad}, J.H. Koivuniemi^b, V.N. Kolosov^u, K. Kondo^{ag}, K. Königsmannⁱ, I. Konorov^{o,q}, V.F. Konstantinov^u, A.M. Kotzinian^{aa,ac}, O. Kouznetsov^g, M. Krämer^q, Z.V. Kroumchtein^g, N. Kuchinski^g, F. Kunne^{v,**}, K. Kurek^{ad}, R.P. Kurjata^{af}, A.A. Lednev^u,

DOI of original article: <https://doi.org/10.1016/j.physletb.2014.11.058>.

* Corresponding author at: University of Trieste, Department of Physics, 34127 Trieste, Italy.

** Corresponding authors.

E-mail addresses: Andrea.Bressan@cern.ch (A. Bressan), Fabienne.Kunne@cern.ch (F. Kunne), tobias.schlueter@physik.uni-muenchen.de (T. Schlüter).

¹ Also at Instituto Superior Técnico, Universidade de Lisboa, Lisbon, Portugal.

² Also at Department of Physics, Pusan National University, Busan 609-735, Republic of Korea and at Physics Department, Brookhaven National Laboratory, Upton, NY 11973, U.S.A.

³ Supported by the DFG Research Training Group Programme 1102 “Physics at Hadron Accelerators”.

⁴ Also at Chubu University, Kasugai, Aichi, 487-8501 Japan.

⁵ Also at KEK, 1-1 Oho, Tsukuba, Ibaraki, 305-0801 Japan.

⁶ Present address: Universität Bonn, Helmholtz-Institut für Strahlen- und Kernphysik, 53115 Bonn, Germany.

⁷ Also at Moscow Institute of Physics and Technology, Moscow Region, 141700, Russia.

⁸ Present address: RWTH Aachen University, III. Physikalisches Institut, 52056 Aachen, Germany.

⁹ Supported by the German Bundesministerium für Bildung und Forschung.

¹⁰ Supported by Czech Republic MEYS Grants ME492 and LA242.

¹¹ Supported by SAIL (CSR), Govt. of India.

¹² Supported by CERN-RFBR Grants 08-02-91009 and 12-02-91500.

¹³ Supported by the Portuguese FCT - Fundação para a Ciência e Tecnologia, COMPETE and QREN, Grants CERN/FP/109323/2009, CERN/FP/116376/2010 and CERN/FP/123600/2011.

¹⁴ Supported by the MEXT and the JSPS under the Grants No.18002006, No.20540299 and No.18540281; Daiko Foundation and Yamada Foundation.

¹⁵ Supported by the DFG cluster of excellence ‘Origin and Structure of the Universe’ (www.universe-cluster.de).

¹⁶ Supported by EU FP7 (HadronPhysics3, Grant Agreement number 283286).

¹⁷ Supported by the Israel Science Foundation, founded by the Israel Academy of Sciences and Humanities.

¹⁸ Supported by the Polish NCN Grant DEC-2011/01/M/ST2/02350.

¹⁹ Deceased.

A. Lehmann^h, M. Levillain^v, S. Levorato^y, J. Lichtenstadt^w, A. Maggiora^{ac}, A. Magnon^v, N. Makke^{x,y}, G.K. Mallot^j, C. Marchand^v, A. Martin^{x,y}, J. Marzec^{af}, J. Matousek^s, H. Matsuda^{ag}, T. Matsudaⁿ, G. Meshcheryakov^g, W. Meyer^b, T. Michigami^{ag}, Yu.V. Mikhailov^u, M. Mikhasenko^j, Y. Miyachi^{ag}, A. Nagaytsev^g, T. Nagel^q, F. Nerling^m, S. Neubert^q, D. Neyret^v, J. Novy^t, W.-D. Nowakⁱ, A.S. Nunes^l, A.G. Olshevsky^g, I. Orlov^g, M. Ostrick^m, R. Panknin^d, D. Panzieri^{ab,ac}, B. Parsamyan^{aa,ac}, S. Paul^q, D.V. Peshekhonov^g, S. Platchkov^v, J. Pochodzalla^m, V.A. Polyakov^u, J. Pretz^{d,8}, M. Quaresma^l, C. Quintans^l, S. Ramos^{l,1}, C. Regaliⁱ, G. Reicherz^b, E. Rocco^j, N.S. Rossiyskaya^g, D.I. Ryabchikov^u, A. Rychter^{af}, V.D. Samoylenko^u, A. Sandacz^{ad}, S. Sarkar^f, I.A. Savin^g, G. Sbrizzai^{x,y}, P. Schiavon^{x,y}, C. Schillⁱ, T. Schlüter^{p,**}, K. Schmidt^{i,3}, H. Schmieden^d, K. Schönnung^j, S. Schopfererⁱ, M. Schott^j, O.Yu. Shevchenko^{g,19}, L. Silva^l, L. Sinha^f, S. Sirtlⁱ, M. Slunecka^g, S. Sosio^{aa,ac}, F. Sozzi^y, A. Srnka^e, L. Steiger^y, M. Stolarski^l, M. Sulc^k, R. Sulej^{ad}, H. Suzuki^{ag,4}, A. Szabelski^{ad}, T. Szameitat^{i,3}, P. Sznajder^{ad}, S. Takekawa^{aa,ac}, J. ter Wolbeek^{i,3}, S. Tessaro^y, F. Tessarotto^y, F. Thibaud^v, S. Uhl^q, I. Uman^p, M. Virius^t, L. Wang^b, T. Weisrock^m, M. Wilfert^m, R. Windmolders^d, H. Wollny^v, K. Zaremba^{af}, M. Zavertyaev^o, E. Zemlyanichkina^g, M. Ziembicki^{af}, A. Zink^h

^a Universität Bielefeld, Fakultät für Physik, 33501 Bielefeld, Germany⁹

^b Universität Bochum, Institut für Experimentalphysik, 44780 Bochum, Germany^{9,16}

^c Universität Bonn, Helmholtz-Institut für Strahlen- und Kernphysik, 53115 Bonn, Germany⁹

^d Universität Bonn, Physikalisches Institut, 53115 Bonn, Germany⁹

^e Institute of Scientific Instruments, AS CR, 61264 Brno, Czech Republic¹⁰

^f Matriveni Institute of Experimental Research & Education, Calcutta-700 030, India¹¹

^g Joint Institute for Nuclear Research, 141980 Dubna, Moscow region, Russia¹²

^h Universität Erlangen-Nürnberg, Physikalisches Institut, 91054 Erlangen, Germany⁹

ⁱ Universität Freiburg, Physikalisches Institut, 79104 Freiburg, Germany^{9,16}

^j CERN, 1211 Geneva 23, Switzerland

^k Technical University in Liberec, 46117 Liberec, Czech Republic¹⁰

^l LIP, 1000-149 Lisbon, Portugal¹³

^m Universität Mainz, Institut für Kernphysik, 55099 Mainz, Germany⁹

ⁿ University of Miyazaki, Miyazaki 889-2192, Japan¹⁴

^o Lebedev Physical Institute, 119991 Moscow, Russia

^p Ludwig-Maximilians-Universität München, Department für Physik, 80799 Munich, Germany^{9,15}

^q Technische Universität München, Physik Department, 85748 Garching, Germany^{9,15}

^r Nagoya University, 464 Nagoya, Japan¹⁴

^s Charles University in Prague, Faculty of Mathematics and Physics, 18000 Prague, Czech Republic¹⁰

^t Czech Technical University in Prague, 16636 Prague, Czech Republic¹⁰

^u State Scientific Center Institute for High Energy Physics of National Research Center 'Kurchatov Institute', 142281 Protvino, Russia

^v CEA IRFU/SPhN Saclay, 91191 Gif-sur-Yvette, France¹⁶

^w Tel Aviv University, School of Physics and Astronomy, 69978 Tel Aviv, Israel¹⁷

^x University of Trieste, Department of Physics, 34127 Trieste, Italy

^y Trieste Section of INFN, 34127 Trieste, Italy

^z Abdus Salam ICTP, 34151 Trieste, Italy

^{aa} University of Turin, Department of Physics, 10125 Turin, Italy

^{ab} University of Eastern Piedmont, 15100 Alessandria, Italy

^{ac} Torino Section of INFN, 10125 Turin, Italy

^{ad} National Centre for Nuclear Research, 00-681 Warsaw, Poland¹⁸

^{ae} University of Warsaw, Faculty of Physics, 00-681 Warsaw, Poland¹⁸

^{af} Warsaw University of Technology, Institute of Radioelectronics, 00-665 Warsaw, Poland¹⁸

^{ag} Yamagata University, Yamagata, 992-8510 Japan¹⁴

ARTICLE INFO

Article history:

Received 26 October 2020

Accepted 28 October 2020

Available online 4 November 2020

Editor: M. Doser

ABSTRACT

In Fig. 5 on p. 311 of our Phys. Lett. B 740 (2015) 303 an adjustment by 180° is required for the phases with respect to the $L = 2, M = 1$ wave, of the following waves: $L = 1, 3, 5$ with $M = 1$, and $L = 2$ with $M = 2$. After this correction (Fig. 5 (corrected) below), the extracted partial waves describe the angular distribution of the $\eta^{(\prime)}$ in the Gottfried-Jackson (GJ) frame, using Eq. (4) with implicit Condon-Shortley phase convention. The other results of our paper are not affected. The right-handed GJ coordinate system was defined by the z-axis pointing in the direction of the beam in the $\eta^{(\prime)}\pi^-$ center-of-mass system and the y-axis pointing in the direction of $\mathbf{p}_{\text{recoil}}^{\text{GJ}} \times \mathbf{p}_{\text{beam}}^{\text{GJ}}$.

© 2014 The Author(s). Published by Elsevier B.V. All rights reserved.

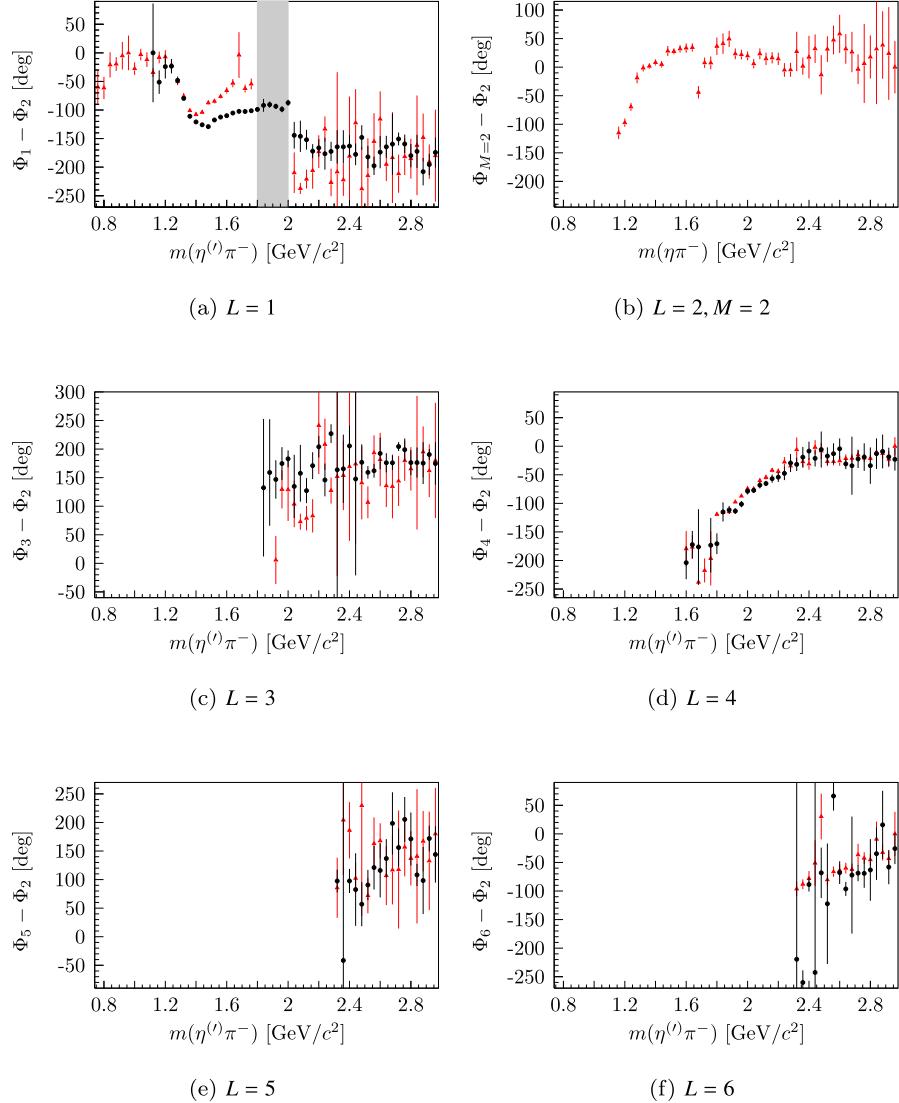


Fig. 5. (corrected): Phases Φ_L of the $M = 1$ partial waves with angular momentum L relative to the $L = 2, M = 1$ wave of $\eta\pi^-$ (triangles, red) and $\eta'\pi^-$ (circles, black) systems. For $\eta\pi^-$, the phase between the P and D -waves is ill-defined in the region of vanishing P -wave intensity between 1.8 and $2.05 \text{ GeV}/c^2$ (shaded). Panel (b) shows the relative $M = 2$ versus $M = 1$ phase of the $\eta\pi^- D$ -wave.