

## Erratum to: Performances of JEM-EUSO: angular reconstruction

### The JEM-EUSO Collaboration

Published online: 15 July 2015

© Springer Science+Business Media Dordrecht 2014

#### Erratum to: Exp Astron

DOI 10.1007/s10686-013-9371-0

The original publication of this article (10.1007/s10686-013-9371-0) unfortunately contained an error. The collaboration name “The JEM-EUSO Collaboration” was erroneously rendered as subtitle. The full collaboration’s author list is provided here which was missing in the original version.

#### The JEM-EUSO Collaboration

J.H. Adams Jr.<sup>md</sup>, S. Ahmad<sup>bb</sup>, J.-N. Albert<sup>ba</sup>, D. Allard<sup>bc</sup>, L. Anchordoqui<sup>mf</sup>, V. Andreev<sup>me</sup>, A. Anzalone<sup>dh,dn</sup>, Y. Arai<sup>ev</sup>, K. Asano<sup>et</sup>, M. Ave Pernas<sup>kc</sup>, P. Baragatti<sup>do</sup>, P. Barrillon<sup>ha</sup>, T. Batsch<sup>hc</sup>, J. Bayer<sup>cd</sup>, R. Bechini<sup>dl</sup>, T. Belenguer<sup>kb</sup>, R. Bellotti<sup>da,db</sup>, K. Belov<sup>me</sup>, A.A. Berlind<sup>mh</sup>, M. Bertaina<sup>dk,dl</sup>, P.L. Biermann<sup>cb</sup>, S. Biktemerova<sup>ia</sup>, C. Blaksley<sup>bc</sup>, N. Blanc<sup>la</sup>, J. Blecki<sup>hd</sup>, S. Blin-Bondil<sup>bb</sup>, J. Blümer<sup>cb</sup>, P. Bobik<sup>ja</sup>, M. Bogomilov<sup>aa</sup>, M. Bonamente<sup>md</sup>, M.S. Briggs<sup>md</sup>, S. Briz<sup>kd</sup>, A. Bruno<sup>da</sup>, F. Cafagna<sup>da</sup>, D. Campana<sup>df</sup>, J.-N. Capdevielle<sup>bc</sup>, R. Caruso<sup>dc,dn</sup>, M. Casolino<sup>ew,di</sup>, C. Cassardo<sup>dk,dl</sup>, G. Castellini<sup>dd</sup>, C. Catalano<sup>bd</sup>, O. Catalano<sup>dh,dn</sup>, A. Cellino<sup>dk,dm</sup>, M. Chikawa<sup>ed</sup>, M.J. Christl<sup>mg</sup>, D. Cline<sup>me</sup>, V. Connaughton<sup>md</sup>, L. Conti<sup>do</sup>, G. Cordero<sup>ga</sup>, H.J. Crawford<sup>ma</sup>, R. Cremonini<sup>dl</sup>, S. Csorna<sup>mh</sup>, S. Dagoret-Campagne<sup>ba</sup>, A.J. de Castro<sup>kd</sup>, C. De Donato<sup>di</sup>, C. de la Taille<sup>bb</sup>, C. De Santis<sup>di,dj</sup>, L. del Peral<sup>kc</sup>, A. Dell’Oro<sup>dk,dm</sup>, N. De Simone<sup>di</sup>, M. Di Martino<sup>dk,dm</sup>, G. Distratis<sup>cd</sup>, F. Dulucq<sup>bb</sup>, M. Dupieux<sup>bd</sup>, A. Ebersold<sup>cb</sup>, T. Ebisuzaki<sup>ew</sup>, R. Engel<sup>cb</sup>, S. Falk<sup>cb</sup>, K. Fang<sup>mb</sup>, F. Fenu<sup>cd</sup>, I. Fernandez-Gomez<sup>kd</sup>, S. Ferrarese<sup>dk,dl</sup>, D. Finco<sup>do</sup>, M. Flamini<sup>do</sup>, C. Fomaro<sup>do</sup>, A. Franceschi<sup>de</sup>, J. Fujimoto<sup>ev</sup>, M. Fukushima<sup>eg</sup>, P. Galeotti<sup>dk,dl</sup>, G. Garipov<sup>ic</sup>, J. Geary<sup>md</sup>, G. Gelmini<sup>me</sup>, G. Giraud<sup>dk</sup>, M. Gonchar<sup>ia</sup>, C. González Alvarado<sup>hb</sup>, P. Gorodetzky<sup>bc</sup>, F. Guarino<sup>df,dg</sup>, A. Guzmán<sup>cd</sup>,

---

The online version of the original article can be found at <http://dx.doi.org/10.1007/s10686-013-9371-0>.

S. Biktemerova

Joint Institute for Nuclear Research, Joliot-Curie 6, 141980 Dubna, Moscow Region, Russia  
e-mail: sveta.biktemerova@gmail.com

A. Guzmán (✉) · T. Mernik

Institut für Astronomie und Astrophysik Tübingen, Sand 1, 72076 Tübingen, Germany  
e-mail: guzman@astro.uni-tuebingen.de

T. Mernik

e-mail: mernik@astro.uni-tuebingen.de

Y. Hachisu<sup>ew</sup>, B. Harlow<sup>ib</sup>, A. Haungs<sup>cb</sup>, J. Hem'andez Carretero<sup>kc</sup>, K. Higashide<sup>er,ew</sup>, D. Ikeda<sup>eg</sup>, H. Ikeda<sup>ep</sup>, N. Inoue<sup>er</sup>, S. Inoue<sup>eg</sup>, A. Insolia<sup>dc,dn</sup>, F. Isgr' o<sup>df,dp</sup>, Y. Itow<sup>em</sup>, E. Jover<sup>ke</sup>, E.G. Judd<sup>ma</sup>, A. Jung<sup>fb</sup>, F. Kajino<sup>ei</sup>, T. Kajino<sup>el</sup>, I. Kaneko<sup>ew</sup>, Y. Karadzov<sup>aa</sup>, J. Karczmarczyk<sup>hc</sup>, M. Karus<sup>cb</sup>, K. Katahira<sup>ew</sup>, K. Kawai<sup>ew</sup>, Y. Kawasaki<sup>ew</sup>, B. Keilhauer<sup>cb</sup>, B.A. Khrenov<sup>ic</sup>, Jeong-Sook Kim<sup>ia</sup>, Soon-Wook Kim<sup>ia</sup>, Sug-Whan Kim<sup>fd</sup>, M. Kleifges<sup>cb</sup>, P.A. Klimov<sup>ic</sup>, D. Kolev<sup>aa</sup>, I. Kreykenbohm<sup>ca</sup>, K. Kudela<sup>ia</sup>, Y. Kurihara<sup>ev</sup>, A. Kusenko<sup>me</sup>, E. Kuznetsov<sup>md</sup>, M. Lacombe<sup>bd</sup>, C. Lachaud<sup>bc</sup>, J. Lee<sup>f,c</sup>, J. Licandro<sup>ke</sup>, H. Lim<sup>f,c</sup>, F. L'opez<sup>kd</sup>, M.C. Maccarone<sup>dh,dn</sup>, K. Mannheim<sup>ce</sup>, D. Maravilla<sup>ga</sup>, L. Marcelli<sup>dj</sup>, A. Marini<sup>de</sup>, O. Martinez<sup>gc</sup>, G. Masciantonio<sup>di,dj</sup>, K. Mase<sup>ea</sup>, R. Matev<sup>aa</sup>, G. Medina-Tanco<sup>ga</sup>, T. Mernik<sup>cd</sup>, H. Miyamoto<sup>ba</sup>, Y. Miyazaki<sup>ec</sup>, Y. Mizumoto<sup>el</sup>, G. Modestino<sup>de</sup>, A. Monaco<sup>da,db</sup>, D. Monnier-Ragaigne<sup>ba</sup>, J.A. Morales de los R'ios<sup>ka,kc</sup>, C. Moretto<sup>ba</sup>, V.S. Morozenko<sup>ic</sup>, B. Mot<sup>bd</sup>, T. Murakami<sup>ef</sup>, M. Nagano<sup>ec</sup>, M. Nagata<sup>eh</sup>, S. Nagataki<sup>ek</sup>, T. Nakamura<sup>ej</sup>, T. Napolitano<sup>de</sup>, D. Naumov<sup>ia</sup>, R. Nava<sup>ab</sup>, A. Neronov<sup>jb</sup>, K. Nomoto<sup>eu</sup>, T. Nonaka<sup>eg</sup>, T. Ogawa<sup>ew</sup>, S. Ogio<sup>eo</sup>, H. Ohmori<sup>ew</sup>, A.V. Olinto<sup>mb</sup>, P. Orlea'nski<sup>hd</sup>, G. Osteria<sup>df</sup>, M.I. Panasyuk<sup>ic</sup>, E. Parizot<sup>bc</sup>, I.H. Park<sup>f,c</sup>, H.W. Park<sup>f,c</sup>, B. Pastircak<sup>ia</sup>, T. Patzak<sup>bc</sup>, T. Paul<sup>mf</sup>, C. Pennypacker<sup>ma</sup>, S. Perez Cano<sup>kc</sup>, T. Peter<sup>jc</sup>, P. Picozza<sup>di,dj,ew</sup>, T. Pierog<sup>cb</sup>, L.W. Piotrowski<sup>ev</sup>, S. Piraino<sup>cd,dh</sup>, Z. Plebaniak<sup>hc</sup>, A. Pollini<sup>ia</sup>, P. Prat<sup>bc</sup>, G. Pr'ev'ot<sup>bc</sup>, H. Prieto<sup>kc</sup>, M. Putis<sup>ia</sup>, P. Reardon<sup>md</sup>, M. Reyes<sup>ke</sup>, M. Ricci<sup>de</sup>, I. Rodr'iguez<sup>kd</sup>, M.D. Rodr'iguez Fr'ias<sup>kc</sup>, F. Ronga<sup>de</sup>, M. Roth<sup>cb</sup>, H. Rothkaehl<sup>hd</sup>, G. Roudil<sup>hd</sup>, I. Rusinov<sup>aa</sup>, M. Rybczy'nski<sup>ha</sup>, M.D. Sabau<sup>kb</sup>, G. S'aez Cano<sup>kc</sup>, H. Sagawa<sup>eg</sup>, A. Saito<sup>ej</sup>, N. Sakaki<sup>cb</sup>, M. Sakata<sup>ei</sup>, H. Salazar<sup>ec</sup>, S. S'anchez<sup>kd</sup>, A. Santangelo<sup>cd</sup>, L. Santiago Cr'uz<sup>ga</sup>, M. Sanz Palomino<sup>kb</sup>, O. Saprykin<sup>ib</sup>, F. Sarazin<sup>mc</sup>, H. Sato<sup>ei</sup>, M. Sato<sup>es</sup>, T. Schanz<sup>cd</sup>, H. Schieler<sup>cb</sup>, V. Scotti<sup>df,dg</sup>, A. Segreto<sup>dh,dn</sup>, S. Selmane<sup>bc</sup>, D. Semikoz<sup>bc</sup>, M. Serra<sup>ke</sup>, S. Sharakin<sup>ic</sup>, T. Shibata<sup>eq</sup>, H.M. Shimizu<sup>em</sup>, K. Shinozaki<sup>ew,cd</sup>, T. Shirahama<sup>er</sup>, G. Siemieniec-Ozie, blio<sup>hb</sup>, H.H. Silva L'opez<sup>ga</sup>, J. Sledd<sup>mg</sup>, K. Słomi'nska<sup>hd</sup>, A. Sobey<sup>mg</sup>, T. Sugiyama<sup>em</sup>, D. Supanitsky<sup>ga</sup>, M. Suzuki<sup>ep</sup>, B. Szabelska<sup>hc</sup>, J. Szabelski<sup>hc</sup>, F. Tajima<sup>ee</sup>, N. Tajima<sup>ew</sup>, T. Tajima<sup>cc</sup>, Y. Takahashi<sup>es</sup>, H. Takami<sup>ev</sup>, M. Takeda<sup>eg</sup>, Y. Takizawa<sup>ew</sup>, C. Tenzer<sup>cd</sup>, O. Tibolla<sup>ec</sup>, L. Tkachev<sup>ia</sup>, H. Tokuno<sup>ea</sup>, T. Tomida<sup>ab</sup>, N. Tone<sup>ab</sup>, S. Toscano<sup>ib</sup>, F. Trillaud<sup>ga</sup>, R. Tsenov<sup>aa</sup>, Y. Tsunesada<sup>et</sup>, K. Tsuno<sup>ew</sup>, T. Tymieniecka<sup>hc</sup>, Y. Uchihori<sup>eb</sup>, M. Unger<sup>cb</sup>, O. Vaduvescu<sup>ke</sup>, J.F. Vald'es-Galicia<sup>ga</sup>, P. Vallania<sup>dk,dm</sup>, L. Valore<sup>df,dg</sup>, G. Vankova<sup>aa</sup>, C. Vigorito<sup>dk,dl</sup>, L. Villase'nor<sup>eb</sup>, P. von Ballmoos<sup>bd</sup>, S. Wada<sup>ew</sup>, J. Watanabe<sup>el</sup>, S. Watanabe<sup>es</sup>, J. Watts Jr.<sup>md</sup>, M. Weber<sup>cb</sup>, T.J. Weiler<sup>mh</sup>, T. Wibig<sup>hc</sup>, L. Wiencke<sup>mc</sup>, M. Wille<sup>ca</sup>, J. Wilms<sup>ca</sup>, Z. Włodarczyk<sup>ha</sup>, T. Yamamoto<sup>ei</sup>, Y. Yamamoto<sup>ei</sup>, J. Yang<sup>fb</sup>, H. Yano<sup>ep</sup>, I.V. Yashin<sup>ic</sup>, D. Yonetoku<sup>ef</sup>, K. Yoshida<sup>ei</sup>, S. Yoshida<sup>ea</sup>, R. Young<sup>mg</sup>, M.Yu. Zotov<sup>ic</sup>, A. Zuccaro Marchi<sup>ew</sup>

<sup>aa</sup> St. Kliment Ohridski University of Sofia, Bulgaria

<sup>ba</sup> LAL, Univ Paris-Sud, CNRS/IN2P3, Orsay, France

<sup>bb</sup> Omega, Ecole Polytechnique, CNRS/IN2P3, Palaiseau, France

<sup>bc</sup> APC, Univ Paris Diderot, CNRS/IN2P3, CEA/Irfu, Obs. de Paris, Sorbonne Paris Cit'e, France

<sup>bd</sup> IRAP, Universit'e de Toulouse, CNRS, Toulouse, France

<sup>ca</sup> ECAP, University of Erlangen-Nuremberg, Germany

<sup>cb</sup> Karlsruhe Institute of Technology (KIT), Germany

<sup>cc</sup> Ludwig Maximilian University, Munich, Germany

<sup>cd</sup> Inst. for Astronomy and Astrophysics, Kepler Center, University of Tübingen, Germany

<sup>ce</sup> Institut für Theoretische Physik und Astrophysik, University of Würzburg, Germany

<sup>da</sup> Istituto Nazionale di Fisica Nucleare - Sezione di Bari, Italy

<sup>db</sup> Universita' degli Studi di Bari Aldo Moro and INFN - Sezione di Bari, Italy

<sup>dc</sup> Dipartimento di Fisica e Astronomia - Universita' di Catania, Italy

<sup>dd</sup> Consiglio Nazionale delle Ricerche (CNR) - Ist. di Fisica Applicata Nello Carrara, Firenze, Italy

<sup>de</sup> Istituto Nazionale di Fisica Nucleare - Laboratori Nazionali di Frascati, Italy

<sup>df</sup> Istituto Nazionale di Fisica Nucleare - Sezione di Napoli, Italy

<sup>dg</sup> Universita' di Napoli Federico II - Dipartimento di Scienze Fisiche, Italy

<sup>dh</sup> INAF - Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo, Italy

<sup>di</sup> Istituto Nazionale di Fisica Nucleare - Sezione di Roma Tor Vergata, Italy

<sup>dj</sup> Universita' di Roma Tor Vergata - Dipartimento di Fisica, Roma, Italy

<sup>dk</sup> Istituto Nazionale di Fisica Nucleare - Sezione di Torino, Italy

<sup>dl</sup> Dipartimento di Fisica, Universita' di Torino, Italy

<sup>dm</sup> Osservatorio Astrofisico di Torino, Istituto Nazionale di Astrofisica, Italy

<sup>dn</sup> Istituto Nazionale di Fisica Nucleare - Sezione di Catania, Italy

<sup>do</sup> UTIU, Dipartimento di Ingegneria, Rome, Italy

<sup>dp</sup> DIETI, Universita' degli Studi di Napoli Federico II, Napoli, Italy

<sup>ea</sup> Chiba University, Chiba, Japan

<sup>eb</sup> National Institute of Radiological Sciences, Chiba, Japan

- ec* Fukui University of Technology, Fukui, Japan  
*ed* Kinki University, Higashi-Osaka, Japan  
*ee* Hiroshima University, Hiroshima, Japan  
*ef* Kanazawa University, Kanazawa, Japan  
*eg* Institute for Cosmic Ray Research, University of Tokyo, Kashiwa, Japan  
*eh* Kobe University, Kobe, Japan  
*ei* Konan University, Kobe, Japan  
*ej* Kyoto University, Kyoto, Japan  
*ek* Yukawa Institute, Kyoto University, Kyoto, Japan  
*el* National Astronomical Observatory, Mitaka, Japan  
*em* Nagoya University, Nagoya, Japan  
*en* Solar-Terrestrial Environment Laboratory, Nagoya University, Nagoya, Japan  
*eo* Graduate School of Science, Osaka City University, Japan  
*ep* Institute of Space and Astronautical Science/JAXA, Sagami-hara, Japan  
*eq* Aoyama Gakuin University, Sagami-hara, Japan  
*er* Saitama University, Saitama, Japan  
*es* Hokkaido University, Sapporo, Japan  
*et* Interactive Research Center of Science, Tokyo Institute of Technology, Tokyo, Japan  
*eu* University of Tokyo, Tokyo, Japan  
*ev* High Energy Accelerator Research Organization (KEK), Tsukuba, Japan  
*ew* RIKEN, Wako, Japan  
*fa* Korea Astronomy and Space Science Institute (KASI), Daejeon, Republic of Korea  
*fb* Ewha Womans University, Seoul, Republic of Korea  
*fc* Sungkyunkwan University, Seoul, Republic of Korea  
*fd* Center for Galaxy Evolution Research, Yonsei University, Seoul, Republic of Korea  
*ga* Universidad Nacional Autónoma de México (UNAM), Mexico  
*gb* Universidad Michoacana de San Nicolás de Hidalgo (UMSNH), Morelia, Mexico  
*gc* Benemérita Universidad Autónoma de Puebla (BUAP), Mexico  
*ha* Jan Kochanowski University, Institute of Physics, Kielce, Poland  
*hb* Jagiellonian University, Astronomical Observatory, Krakow, Poland  
*hc* National Centre for Nuclear Research, Lodz, Poland  
*hd* Space Research Centre of the Polish Academy of Sciences (CBK), Warsaw, Poland  
*ia* Joint Institute for Nuclear Research, Dubna, Russia  
*ib* Central Research Institute of Machine Building, TsNIIMash, Korolev, Russia  
*ic* Skobeltsyn Institute of Nuclear Physics, Lomonosov Moscow State University, Russia  
*ja* Institute of Experimental Physics, Kosice, Slovakia  
*ka* Consejo Superior de Investigaciones Científicas (CSIC), Madrid, Spain  
*kb* Instituto Nacional de Técnica Aeroespacial (INTA), Madrid, Spain  
*kc* Universidad de Alcalá (UAH), Madrid, Spain  
*kd* Universidad Carlos III de Madrid, Spain  
*ke* Instituto de Astrofísica de Canarias (IAC), Tenerife, Spain  
*la* Swiss Center for Electronics and Microtechnology (CSEM), Neuchâtel, Switzerland  
*lb* ISDC Data Centre for Astrophysics, Versoix, Switzerland  
*lc* Institute for Atmospheric and Climate Science, ETH Zürich, Switzerland  
*ma* Space Science Laboratory, University of California, Berkeley, USA  
*mb* University of Chicago, USA  
*mc* Colorado School of Mines, Golden, USA  
*md* University of Alabama in Huntsville, Huntsville, USA  
*me* University of California (UCLA), Los Angeles, USA  
*mf* University of Wisconsin-Milwaukee, Milwaukee, USA  
*mg* NASA - Marshall Space Flight Center, USA  
*mh* Vanderbilt University, Nashville, USA