

[arXiv:1912.08666v1](https://arxiv.org/abs/1912.08666v1) [astro-ph.HE] 18 Dec 2019

JEM-EUSO Collaboration contributions to the 36th International Cosmic Ray Conference

[arXiv:1907.08728](https://arxiv.org/abs/1907.08728) [[pdf](#), [other](#)]

Title: Development of a Cherenkov Telescope for the Detection of Ultrahigh Energy Neutrinos with EUSO-SPB2 and POEMMA

Authors: [A. Nepomuk Otte](#) (1), [Eliza Gazda](#) (1), [Eleanor Judd](#) (2), [John F. Krizmanic](#) (3), [Evgeny Kutzenzov](#) (4), [Oscar Romero Matamala](#) (1), [Patrick J. Reardon](#) (4 and 5), [Lawrence Wiencke](#) (6) (for the JEM-EUSO and POEMMA

Collaborations) ((1) School of Physics & Center for Relativistic Astrophysics, Georgia Institute of Technology, (2) UC Berkley, Space Sciences Laboratory, (3) University of Maryland, Baltimore County, (4) The University of Alabama in Huntsville, (5) Center for Applied Optics, (6) Colorado School of Mines)

Comments: Proceedings of the 36th International Cosmic Ray Conference, PoS(ICRC2019)977

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM); Instrumentation and Detectors (physics.ins-det)

[arXiv:1908.09136](https://arxiv.org/abs/1908.09136) [[pdf](#), [other](#)]

Title: Silicon Photomultipliers for Orbital Ultra High Energy Cosmic Ray Observation

Authors: [W. Painter](#), [A. Haungs](#), [T. Huber](#), [M. Karus](#), [A. Menshikov](#), [M. Oehler](#), [M. Renschler](#), [JEM-EUSO Collaboration](#)

Comments: presented at the 36th ICRC (Madison, WI; 2019)

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM); High Energy Astrophysical Phenomena (astro-ph.HE); Instrumentation and Detectors (physics.ins-det)

[arXiv:1909.01680](https://arxiv.org/abs/1909.01680) [[pdf](#), [other](#)]

Title: The Data Processor of the EUSO-SPB2 Telescopes

Authors: [Giuseppe Osteria](#), [Valentina Scotti](#), [Francesco Perfetto](#)

Comments: 7 pages, 2 figures, 36th International Cosmic Ray Conference -ICRC2019- July 24th - August 1st, 2019
Madison, WI, U.S.A

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM); High Energy Astrophysical Phenomena (astro-ph.HE)

[arXiv:1909.02306](#) [[pdf](#), [other](#)]

Title: The EUSO@TurLab: Test of Mini-EUSO Engineering Model

Authors: [H. Miyamoto](#), [M. Battisti](#), [A. Belov](#), [M. E. Bertaina](#), [F. Bisconti](#), [R. Bonino](#), [S. Blin-Bondil](#), [F. Cafagna](#), [G. Cambiè](#), [F. Capel](#), [R. Caruso](#), [M. Casolino](#), [A. Cellino](#), [I. Churilo](#), [G. Contino](#), [G. Cotto](#), [A. Djakonow](#), [T. Ebisuzaki](#), [F. Fausti](#), [F. Fenu](#), [C. Fornaro](#), [A. Franceschi](#), [C. Fuglesang](#), [D. Gardiol](#), [P. Gorodetzky](#), [F. Kajino](#), [P. Klimov](#), [L. Marcelli](#), [W. Marszał](#), [M. Mignone](#), [A. Murashov](#), [T. Napolitano](#), [G. Osteria](#), [M. Panasyuk](#), [E. Parizot](#), [A. Poroshin](#), [P. Picozza](#), [L. W. Piotrowski](#), [Z. Plebaniak](#), [G. Prévôt](#), [M. Przybylak](#), [E. Reali](#), [M. Ricci](#), [N. Sakaki](#), [K. Shinozaki](#), [G. Suino](#), [J. Szabelski](#), [Y. Takizawa](#), [M. Traïche](#), [S. Turriziani](#) (for the JEM-EUSO Collaboration)

Comments: 8 pages, 6 figures, ICRC2019

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM)

[arXiv:1909.02663](#) [[pdf](#), [other](#)]

Title: UCIRC2: An Infrared Cloud Monitor for EUSO-SPB2

Authors: [Rebecca Diesing](#), [Khadijat Durojaiye](#), [Seamus Flannery](#), [Kameron Mehling](#), [Noah Friedlander](#), [Alexa Bukowski](#), [Emily Donovan](#), [Stephan Meyer](#), [Angela V. Olinto](#)

Comments: 8 pages, 5 figures, proceedings of the 36th International Cosmic Ray Conference (ICRC 2019)

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM)

[arXiv:1909.03005](#) [[pdf](#), [other](#)]

Title: Results of the EUSO-SPB1 flight

Authors: [J. Eser](#), [A. Olinto](#), [L. Wiencke](#) (for the JEM-EUSO Collaboration)

Comments: presented at the 36th ICRC (Madison, WI; 2019)

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM); High Energy Physics - Experiment (hep-ex)

[arXiv:1909.03028](#) [[pdf](#), [other](#)]

Title: EUSO-TA ground based fluorescence detector: analysis of the detected events

Authors: [F. Bisconti](#), [J.W. Belz](#), [M.E. Bertaina](#), [S. Blin-Bondil](#), [F. Capel](#), [M. Casolino](#), [T. Ebisuzaki](#), [J. Eser](#), [P. Gorodetzky](#), [J.N. Matthews](#), [E. Parizot](#), [L.W. Piotrowski](#), [Z. Plebaniak](#), [G. Prévôt](#), [M. Putis](#), [H. Sagawa](#), [N. Sakaki](#), [H. Shin](#), [K.](#)

[Shinozaki](#), [P. Sokolsky](#), [Y. Takizawa](#), [Y. Tameda](#), [G.B. Thomson](#) (for the JEM-EUSO Collaboration)

Comments: presented at the 36th ICRC (Madison, WI; 2019)

Subjects: High Energy Astrophysical Phenomena (astro-ph.HE); Instrumentation and Methods for Astrophysics (astro-ph.IM)

[arXiv:1909.03080](#) [[pdf](#), [other](#)]

Title: Mini-EUSO engineering model: tests in open-sky condition

Authors: [F. Bisconti](#), [D. Barghini](#), [M. Battisti](#), [A. Belov](#), [M.E. Bertaina](#), [S. Blin-Bondil](#), [F. Cafagna](#), [G. Cambiè](#), [F. Capel](#), [M. Casolino](#), [A. Cellino](#), [I. Churilo](#), [G. Cotto](#), [A. Djakonow](#), [T. Ebisuzaki](#), [F. Fausti](#), [F. Fenu](#), [C. Fornaro](#), [A. Franceschi](#), [C. Fuglesang](#), [D. Gardiol](#), [P. Gorodetzky](#), [F. Kajino](#), [P. Klimov](#), [L. Marcelli](#), [W. Marszał](#), [M. Mignone](#), [H. Miyamoto](#), [A. Murashov](#), [T. Napolitano](#), [G. Osteria](#), [M. Panasyuk](#), [E. Parizot](#), [A. Poroshin](#), [P. Picozza](#), [L.W. Piotrowski](#), [Z. Plebaniak](#), [G. Prévôt](#), [M. Przybylak](#), [E. Reali](#), [M. Ricci](#), [N. Sakaki](#), [K. Shinozaki](#), [G. Suino](#), [J. Szabelski](#), [Y. Takizawa](#), [M. Traïche](#), [S. Turriziani](#) (for the JEM-EUSO Collaboration)

Comments: presented at the 36th ICRC (Madison, WI; 2019)

Subjects: High Energy Astrophysical Phenomena (astro-ph.HE); Instrumentation and Methods for Astrophysics (astro-ph.IM)

[arXiv:1909.03247](#) [[pdf](#), [other](#)]

Title: Search for Ultra High Energy Cosmic Rays from Space -- The JEM-EUSO Program

Authors: [Mario Bertaina](#), [JEM-EUSO Collaboration](#)

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM); High Energy Astrophysical Phenomena (astro-ph.HE); Instrumentation and Detectors (physics.ins-det); Space Physics (physics.space-ph)

[arXiv:1909.03680](#) [[pdf](#), [other](#)]

Title: Machine Learning Approach for Air Shower Recognition in EUSO-SPB Data

Authors: [Michal Vrábel](#), [Ján Genčí](#), [Pavol Bobik](#), [Francesca Bisconti](#) (for the JEM-EUSO Collaboration)

Comments: 8 pages, 8 figures, ICRC2019

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM); Machine Learning (cs.LG)

[arXiv:1909.04279](#) [[pdf](#), [other](#)]

Title: Laser test with Mini-EUSO

Authors: [Viktoria Kungel](#), [Mario E. Bertaina](#), [Francesca Bisconti](#), [Marco Casolino](#), [Johannes Eser](#), [Lawrence Wiencke](#), [JEM-EUSO Collaboration](#)

Comments: Presented at the 36th ICRC (Madison, WI; 2019)

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM); High Energy Physics - Experiment (hep-ex)

[arXiv:1909.05049](#) [[pdf](#), [other](#)]

Title: Calibration of the EUSO-TA detector with stars

Authors: [Z. Plebaniak](#), [J. Szabelski](#), [M. Przybylak](#), [L.W. Piotrowski](#), [A. Djakonow](#), [K. Krolik](#) (for the JEM-EUSO Collaboration)

Comments: presented at the 36th ICRC (Madison, WI; 2019)

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM)

[arXiv:1909.05540](#) [[pdf](#), [other](#)]

Title: Trigger developments for the fluorescence detector of EUSO-TA and EUSO-SPB2

Authors: [M. Battisti](#), [M. Bertaina](#), [F. Fenu](#), [H. Miyamoto](#), [K. Shinozaki](#), [A. Belov](#), [F. Bisconti](#), [M. Mignone](#), [F. Capel](#) (for the JEM-EUSO Collaboration)

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM)

[arXiv:1909.05601](#) [[pdf](#), [other](#)]

Title: Space Debris detection and tracking with the techniques of cosmic ray physics

Authors: [H. Miyamoto](#), [M. Battisti](#), [A. Belov](#), [M. E. Bertaina](#), [F. Bisconti](#), [R. Bonino](#), [S. Blin-Bondil](#), [F. Cafagna](#), [G. Cambiè](#), [F. Capel](#), [M. Casolino](#), [A. Cellino](#), [I. Churilo](#), [G. Cotto](#), [A. Djakonow](#), [T. Ebisuzaki](#), [F. Fausti](#), [F. Fenu](#), [C. Fornaro](#), [A. Franceschi](#), [C. Fuglesang](#), [D. Gardiol](#), [P. Gorodetzky](#), [F. Kajino](#), [P. Klimov](#), [L. Marcelli](#), [W. Marszał](#), [M. Mignone](#), [A. Murashov](#), [T. Napolitano](#), [G. Osteria](#), [M. Panasyuk](#), [E. Parizot](#), [A. Poroshin](#), [P. Picozza](#), [L. W. Piotrowski](#), [Z. Plebaniak](#), [G. Prévôt](#), [M. Przybylak](#), [E. Reali](#), [M. Ricci](#), [N. Sakaki](#), [K. Shinozaki](#), [G. Suino](#), [J. Szabelski](#), [Y. Takizawa](#), [M. Traïche](#), [S. Turriziani](#) (for the JEM-EUSO Collaboration)

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM)

[arXiv:1909.05713](#) [[pdf](#), [ps](#), [other](#)]

Title: Estimation of the exposure for the air shower detection mode of EUSO-SPB1

Authors: [K. Shinozaki](#), [M. Bertaina](#), [F. Bisconti](#), [F.Fenu](#), [S. Ferrarese](#), [S. Monte](#), [A. Anzalone](#), [A. Bruno](#), [S. Briz](#), [A. Diaz](#), [J. Eser](#), [L. Wiencke](#), [A. Olinto](#), [M. Vrabel](#) for JEM-EUSO Collaboration

Comments: 8 pages, 9 figures, presented in 36th International Cosmic Ray Conference (Madison)

Journal-ref: Proceedings of the 36th International Cosmic Ray Conference (Madison; 2019) Pos(ICRC2019) 427

Subjects: High Energy Astrophysical Phenomena (astro-ph.HE); Instrumentation and Methods for Astrophysics (astro-ph.IM)

[arXiv:1909.05917](#) [[pdf](#), [other](#)]

Title: A method for Cloud Mapping in the Field of View of the Infra-Red Camera during the EUSO-SPB1 flight

Authors: [Alessandro Bruno](#), [Anna Anzalone](#), [Carlo Vigorito](#) (for the JEM-EUSO collaboration)

Comments: 7 pages, 8 figures, 36th International Cosmic Ray Conference -ICRC2019

Journal-ref: 36th International Cosmic Ray Conference (ICRC2019), volume=36, year=2019 }

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM); Earth and Planetary Astrophysics (astro-ph.EP); Computer Vision and Pattern Recognition (cs.CV); Machine Learning (cs.LG)

[arXiv:1909.08323](#) [[pdf](#), [other](#)]

Title: EUSO-SPB1: Flight data classification and Air Shower Search Results

Authors: [Abraham Diaz Damian](#) (for the JEM-EUSO collaboration)

Comments: 7 Pages, 6 Figures. Presented in 36th International Cosmic Ray Conference (Madison, USA)

Journal-ref: Proceedings of the 36th International Cosmic Ray Conference (Madison; 2019) Pos(ICRC2019) 240

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM)

[arXiv:1909.09346](#) [[pdf](#), [other](#)]

Title: Results and status of the EUSO-TA detector

Authors: [Lech Wiktor Piotrowski](#) (for the JEM-EUSO collaboration)

Comments: Proceedings of 36th International Cosmic Ray Conference -ICRC2019-

Subjects: High Energy Astrophysical Phenomena (astro-ph.HE); Instrumentation and Methods for Astrophysics (astro-ph.IM)

[arXiv:1909.09782](#) [[pdf](#), [other](#)]

Title: Weather Research and Forecasting) model and radiative methods for cloud top height retrieval along the EUSO-SPB1 trajectory

Authors: [Silvia Monte](#), [Carlo Vigorito](#), [Mario Bertaina](#), [Silvia Ferrarese](#), [Kenji Shinozaki](#), [Susana Briz](#), [JEM-EUSO Collaboration](#)

Subjects: Atmospheric and Oceanic Physics (physics.a0-ph); Earth and Planetary Astrophysics (astro-ph.EP); Instrumentation and Methods for Astrophysics (astro-ph.IM)

[arXiv:1909.12006](#) [[pdf](#), [other](#)]

Title: Results from the first missions of the JEM-EUSO program

Authors: [Francesco Fenu](#)

Comments: ICRC 2019 proceeding

Subjects: High Energy Astrophysical Phenomena (astro-ph.HE); Instrumentation and Methods for Astrophysics (astro-ph.IM)

[arXiv:1909.12007](#) [[pdf](#), [other](#)]

Title: Cherenkov light from Horizontal Air Shower

Authors: [K. Królik](#), [A. Djakonow](#), [Z. Plebaniak](#), [M. Przybylak](#), [J. Szabelski](#), [L. Wiencke](#) (for the JEM-EUSO Collaboration)

Comments: presented at the 36th ICRC (Madison, WI; 2019)

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM)

[arXiv:1909.12012](#) [[pdf](#), [other](#)]

Title: Simulations for the JEM-EUSO program with ESAF

Authors: [Francesco Fenu](#), [Kenji Shinozaki](#), [Hiroko Miyamoto](#), [Alessandro Liberatore](#), [Naoto Sakaki](#), [Sergei Sharakin](#), [Mikhail Zotov](#), [Gabriel Chiritoi](#)

Comments: ICRC 2019 proceeding

Subjects: High Energy Astrophysical Phenomena (astro-ph.HE); Instrumentation and Methods for Astrophysics (astro-ph.IM)

[arXiv:1909.12576](#) [[pdf](#), [other](#)]

Title: Mini-EUSO experiment to study UV emission of terrestrial and astrophysical origin onboard of the International Space Station

Authors: [M. Casolino](#), [M. Battisti](#), [A. Belov](#), [M. Bertaina](#), [F. Bisconti](#), [S. Blin-Bondil](#), [F. Cafagna](#), [G. Cambiè](#), [F. Capel](#), [I. Churilo](#), [G. Cotto](#), [A. Djakonow](#), [T. Ebisuzaki](#), [F. Fausti](#), [F. Fenu](#), [C. Fornaro](#), [A. Franceschi](#), [C. Fuglesang](#), [P. Gorodetzky](#), [A. Haungs](#), [F. Kajino](#), [P. Klimov](#), [L. Marcelli](#), [W. Marszał](#), [M. Mignone](#), [H. Miyamoto](#), [A. Murashov](#), [T. Napolitano](#), [G. Osteria](#), [M. Panasyuk](#), [A. Poroshin](#), [E. Parizot](#), [P. Picozza](#), [L.W. Piotrowski](#), [Z. Plebaniak](#), [G. Prévôt](#), [M. Przybylak](#), [E. Reali](#), [M. Ricci](#), [N. Sakaki](#), [K. Shinozaki](#), [J. Szabelski](#), [Y. Takizawa](#), [M. Traïche](#), [S. Turriziani](#)

Comments: 8 pages, 12 figures, ICRC2019

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM); High Energy Astrophysical Phenomena (astro-ph.HE)

[arXiv:1909.12835](#) [[pdf](#), [other](#)]

Title: The Extreme Universe Space Observatory on a Super-Pressure Balloon II Mission

Authors: [L. Wiencke](#), [A. Olinto](#) (for the JEM-EUSO and POEMMA Collaborations)

Comments: presented at the 36th ICRC (Madison, WI; 2019)

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM)