

ILIAS M. FERNINI
E-mail: ifernini@sharjah.ac.ae



EDUCATION:

Ph.D. in Physics (Major: Astrophysics), 1991
University of New Mexico, Albuquerque (USA)

MS. in Astrophysics, 1985
Iowa State University, Ames, Iowa (USA)

BS. in Solid State Physics, 1982
University of Science and Technology, Algiers (Algeria)

WORK EXPERIENCE:

01/2021-Present: Professor, University of Sharjah

02/2016-Present: Deputy General Director
Sharjah Academy for Astronomy, Space Sciences, and Technology

02/2016-01/2021: Associate Professor, University of Sharjah

03/2002-12/2015: Associate Professor, *United Arab Emirates Univ*

09/1997-03/2002: Assistant Professor, *United Arab Emirates Univ.*

09/1995-08/1997: Math Instructor, *Dona Ana Comm. Coll., Las Cruces, NM (USA)*

01/1996-07/1997: Math/Physics Instructor, *El Paso Comm. Coll., El Paso, TX (USA)*

08/1994-08/1997: Post-Doc, *New Mexico State University, Las Cruces, NM (USA)*

04/1992-07/1994: Assistant Professor, *University of Blida, Algeria*

05/1989-08/1989: VLA Summer Student Research Assistant (*National Radio Astronomy Observatory, Socorro, NM, USA*)

08/1984-12/1986: Teaching Assistant, *Iowa State University, Ames, Iowa (USA)*

AWARDS:

Merit Award for World Top 1% Journal Publications for 2014 (Astrophysical Journal Supplement Series) – United Arab Emirates University, December 2015

Merit Award for Best Faculty Member – College of Science, United Arab Emirates University, June 2006.

Best Non-Funded Research, 6th UAEU Research Conference, April 24-26, 2005.

RESEARCH INTERESTS

Active galactic nuclei
Mars Atmosphere
Lunar crescent visibility problem
History of Islamic Science

LECTURES:

- **General Public Lectures / Astronomical Observations: More than 500**

Public Schools

Government Agencies

Clubs

Universities

- **Specialized Lectures: More than 100**

International Conferences

Universities

Workshops

INTERNATIONAL CONFERENCES:

Recent Advances in Space Technologies 2019 (RAST 2019), Jun. 11-14, 2019 (Istanbul, Turkey)

First Sharjah International Conference on Particle Physics, Astrophysics, and Cosmology (FISICPAC), Nov. 11-13, 2018, Sharjah (UAE)

Fourth Algerian Conference on Astronomy and Astrophysics, "Active Galactic Nuclei - Unification of FR II Radio Galaxies & Quasars," Mar. 27-29, 2017, Khenchela (Algeria)

Frontiers in Theoretical and Applied Physics (FTAPS 2017), "Radio Properties of FR II Radio Galaxies and Quasars," Mar. 22-25, 2017, Sharjah (UAE)

"RTG Renewable Conference – University of Oldenburg," Invited Speaker: "Radio Observations of Radio Galaxies and Quasars," Oct. 04 – 07, 2016, Oldenburg (Germany)

Second Middle East-Africa, Regional International Astronomical Union Meeting (MEARIM 2011), 10-15 April 2011, Cape Town (South Africa)

216th Meeting of the American Astronomical Society, May 23-27, 2010, Miami (FL, USA).

International Astronomical Union – UNESCO Symposium 260 (IAUS 260) – The Role of Astronomy in Society and Culture, 19-23 January 2009, Paris (France)

First Middle East-Africa, Regional International Astronomical Union Meeting (MEARIM 2008), 05-10 April 2008, Cairo (Egypt)

"Extragalactic Jets: Theory and Observation – From Radio to Gamma Ray," 21-24 May 2007, Girdwood, Alaska (USA)

First Emirates Astronomical International Conference: Applications of Astronomical Calculations", Abu-Dhabi (UAE), Dec. 13-14, 2006.

208th Meeting of the American Astronomical Society, 04-08 June 2006, Calgary (Canada).
National Astronomy Meeting 2006, 04-08 April, 2006, University of Leicester - England

UN/ESA/NASA/UAE Workshop on the International Heliophysical Year 2007, 20-23 November 2005, (Al-Ain, UAE)
204th Meeting of the American Astronomical Society, May 30- June 03, 2004, Denver (Colorado, USA)

195th Meeting of the American Astronomical Society, 11 – 15 January 2000, Atlanta (Georgia, USA).

Space Telescope Science Institute: *Life Cycles of Radio Galaxies*, July 15- July 17, 1999, Baltimore (Maryland, USA).

UNIVERSE 98: 110th Annual Meeting of the Astronomical Society of the Pacific, June 25 – July 1, 1998, Albuquerque, (New Mexico, USA)

International Symposium on Teaching Astronomy to Non-Science Majors, Astronomical Society of the Pacific, June 29 – June 30, 1998, Albuquerque, (New Mexico, USA)

REGIONAL CONFERENCES:

2nd UAE-Japan Workshop “Planetary Exploration and Meteorite Search”, Dec. 24-25, 2019, Sharjah Academy for Astronomy, Space Sciences, and Technology (UAE).

1st Workshop on Space Sciences Education Research in the Middle East (2019), International Astronomical Union (IAU) Commission C1 Astronomy Education and Development, Sharjah Academy for Astronomy, Space Sciences, and Technology, Oct. 28-29, 2019.

“Astronomy Teachers Workshop”, September 29, 2019, Sharjah Academy for Astronomy, Space Sciences, and Technology (UAE).

15th Gulf Astronomy Colloquium, “SAASST Research Laboratories,” September 28, 2019, Sharjah Academy for Astronomy, Space Sciences, and Technology (UAE).

1st UAE-Japan Space Exploration Symposium, University of Sharjah/Sharjah Academy for Astronomy and Space Sciences, Feb. 17-18, 2018.

“Do Black Holes Exist? Observations - Challenges – Opportunities,” International Workshop, Sharjah Center for Astronomy and Space Sciences, March 6 – 7, 2017.

13th Gulf Astronomy Colloquium, “High-Resolution VLA Observations of FR II Radio Sources at 3.6 cm”, April 13-14, 2013, American University of Sharjah, Sharjah (UAE).

12th Gulf Astronomy Colloquium, “Statistical Analysis of the Crescent Visibility Criteria,” April 14, 2012, New York University, Abu-Dhabi (UAE).

11th Forum, Astronomy in the Gulf, Bahrain Astronomical Society, “The FR II Radio Galaxies and Quasars at High-Redshifts: Similarities and Differences,” April 18-19, 2011 (Bahrain).

“International Year of Astronomy 2009: A Year of Educational Activities in the UAE,” New York University, Abu-Dhabi Institute, “Frontiers in Physics,” January 11-13, 2010, Abu-Dhabi (UAE).

9th Gulf Astronomy Colloquium: "The FRI/FRII Classification of Extragalactic Radio Sources", UAE University, March 28, 2009, Al-Ain (UAE).

"Al-Battani's Astronomy Teachers Workshop," International Year of Astronomy 2009, UAE University, March 29, 2009,

The Eighth Annual U.A.E. University Research Conference. April 2007, "Hot Spots Position as an Orientation Indicator in FRII's Radio Galaxies and Quasars."

The Eighth Annual U.A.E. University Research Conference. April 2007, "Yallop's Criterion as a Test for the Earliest Crescent Visibility."

Third Annual Conference for Middle East Teachers of Science, Mathematics and Computing, "Teaching Astronomy to Non-Science Majors", Mar. 17-19, 2007, Abu-Dhabi (UAE)

7th Gulf Astronomy Colloquium: "Hot Spots Location in Radio Galaxies and Quasars", February 22, 2007, University of Bahrain/Bahrain Astronomical Society, Bahrain.

The Seventh Annual U.A.E. University Research Conference. April 2006, "Hot Spots Analysis in FRII 3CR Radio Sources with $0.3 < z < 2.0$ ".

The Sixth Annual U.A.E. University Research Conference, April 2005, "8.4 GHz High-Resolution Observations of Fanaroff-Riley II 3CR Radio Sources with $0.3 < z < 2.0$. II. Ten New Images.

6th Gulf Astronomy Colloquium: Astronomy in the Gulf, March 30, 2006, "The Extragalactic Zoo: Quasars, Radio Galaxies, Blazars", American University of Sharjah – UAE

6th Gulf Astronomy Colloquium: Astronomy in the Gulf, March 30, 2006, "Islamic Astronomy: Golden Names, Forgotten Civilization", American University of Sharjah – UAE

4th Gulf Astronomy Colloquium: Astronomy in the Gulf, December 04, 2003, "A Model for the Depolarizing Medium for Radio Galaxies and Quasars," University of Bahrain/Bahrain Astronomical Society," Bahrain.

4th Gulf Astronomy Colloquium: Astronomy in the Gulf, December 04, 2003, "Teaching Digitally," University of Bahrain/Bahrain Astronomical Society," Bahrain.

3rd Gulf Astronomy Colloquium: Astronomy in the UAE, May 22, 2003, "Radio Galaxies and Quasars Unification Scheme: The Observational View," American University of Sharjah, United Arab Emirates

2nd Gulf Astronomy Colloquium: Astronomy in the UAE, May 09, 2002, "Radio Observations of Hot Spots," UAE University, United Arab Emirates.

1st Gulf Astronomy Colloquium: Astronomy in the UAE, November 23, 2000, "Teaching Astronomy to Non-Science Majors," American University of Sharjah, United Arab Emirates.

1st Gulf Astronomy Colloquium: Astronomy in the UAE, November 23, 2000, "FRII Radio Galaxies and Quasars: The Depolarization Test," American University of Sharjah, United Arab Emirates.

PUBLICATIONS:

“Pre-sunset L-band Scintillation over Arabian Peninsula,” M. M. Shaikh and I. Fernini, ION International Technical Meeting 2021, January 25-28, 2021.

“Daytime GNSS scintillation due to Es over Arabian Peninsula in Low Solar Activity,” Shaikh M. M., Gopakumar G., AbdelRahman H. K., Kashcheyev A., and Fernini I. (2020), Results in Physics, <https://doi.org/10.1016/j.rinp.2020.103761>.

“Sharjah Academy for Astronomy, Space Sciences, and Technology (SAASST): A Higher Education Space Sciences Oasis in the Middle East.” I. Fernini. Higher Education Digest Magazine, October 14, 2020. <https://www.highereducationdigest.com/sharjah-academy-for-astronomy-space-sciences-and-technology-saast-a-higher-education-space-sciences-oasis-in-the-middle-east/>

“Contribution of Meteor Flux in the Occurrence of Sporadic-E over Arabian Peninsula,” Shaikh M. M., Gopakumar G., Fernini I., Aisha Al-Owais, and Maryam Sharif (2020). Journal Geophysical Research Letters, Submitted.

“Detection of Jovian Radio Emission at 20.1 MHz with a Decametric Radio Array”, I. Fernini, M. Rihan, A. Yousef, S. R. Madara, F. Al Aydarooos, and A. AlHameed, IAC 2020 Cyber Space Edition, 12-14 October 2020

“Observing at 1.4 GHz with the Sharjah New 40-m Radio Interferometer”, A. Asmaa, I. Fernini, A. Manousakis, H. AlNaimiy, A. Noorani, and A. Javed, IAC 2020 Cyber Space Edition, 12-14 October 2020

“The High Energy Astrophysics Group in the Light of Sharjah-Sat-1 and Future Projects”, A. Manousakis, N. AlAmeri, M. AlQasimi, E. Kalamci, I. Fernini, and H. AlNaimiy, IAC 2020 Cyber Space Edition, 12-14 October 2020

“Promoting STEM through the Sharjah Academy for Astronomy, Space Sciences, and Technology,” I. Fernini and H. AlNaimiy, IAC 2020 Cyber Space Edition, 12-14 October 2020

“Sustainability of Artificial Martian Atmosphere,” I. Fernini, R. Fernini, A. Noorani, M. AlShamsi, and M. AlQasimi, IAC 2020 Cyber Space Edition, 12-14 October 2020

“SharjahSat-1 Thermal Analysis for Orbit-Launch Selection”, I. AlSabt, T. AlKaabi, S. R. Madara, I. Fernini, B. Karabulut, E. Catal, H. Telli, H. AlNaimiy, and A. R. Aslan, IAC 2020 Cyber Space Edition, 12-14 October 2020

“Lunar Flashes,” M. Talafha, I. Fernini, H. AlNaimiy, F. Chogle, and A. Pratap, IAC 2020 Cyber Space Edition, 12-14 October 2020

“SAASST Ground Station: Satellite Tracking and Control for High Data Rates,” T. AlKaabi, I. AlSabt, S. R. Madara, I. Fernini, B. Karabulut, A. R. Aslan, and H. AlNaimiy, IAC 2020 CyberSpace Edition, 12-14 October 2020

“Reporting Pre-sunset Scintillation on GNSS Frequencies over Arabian Peninsula.” Shaikh M. M. and Fernini I. 33rd General Assembly and Scientific Symposium, International Union of Radio Science, Rome 2020.

“Occurrence of Pre-sunset L-band and E-band Scintillation Due to Strong Presence of Sporadic-E over Arabian Peninsula,” M. M. Shaikh, I. Fernini, G. Gopakumar, N. M. Alameri, *Advances in Space Research*, <https://doi.org/10.1016/j.asr.2020.02.011>, 2020

“Decametric Radio Observations of Jupiter-Io Emission at 20.1 MHz,” I. Fernini, M. B. Rihan, A. Y. Mustafa, S. R. Madara, R. Fernini, F. Al-Aydaros, *URSI GASS 2020*, Rome, Italy, August 29 - September 05 2020

“The UAE Meteor Monitoring Network,” I. Fernini, M. Talafha, I. Abu Jami, A. Al-Owais, R. Fernini, A. Ahmad, M. Sharif, M. Al-Naser, Y. Eisa, S. Zarafshan, S. Subhi, *Journal of Instrumentation*, DOI: 10.1088/1748-0221/15/06/T06007 - 2020

“Sharjah Five-Meter Radio Telescope,” I. Fernini, H. M. Al-Naimiy, A. Alhameed, A. Noorani, A. Javed, and A. Abujami, *Journal of Instrumentation*, 15, P01033, 2020

“UAE launches meteor and debris monitoring network,” I. Fernini, M. Talafha, S. Subhi, A. Alowais and M. Sharif, *Room Space Journal*, Issue 21, 100-103, 2019

“Meteor Double and Triple Detections,” I. Fernini, M. Talafha, A. Al-Owais, Y. E. Yousef, M. Sharif, M. Al-Naser, S. Zarafshan, H. Al-Naimiy, A. H. Harriri, I. Abu-Jami, S. Subhi, Y. Al-Nahdi, R. Fernini, A. O. Adwan, *Proceedings of the International Meteor Conference*, Bollmannsruh, Germany, 60-62, 2019

“Meteorite Hunting Using Deep Learning and UAVs,” A. A. Alowais, S. Naseem, T. M. Dawdi, M. A. Ahmed, A. O. Adwan, Y. M. Elkalyoubi, K. A. I. K. Hassan, and I. Fernini, 2019 International Conference on Signal Processing and Information Security (ICSPIS2019), DOI: 10.1109/ICSPIS48135.2019.9045905, *IEEE Xplore*: March 26 2020.

“Astronomical Handbook 2020”, I. Fernini, SAASST Publications, 200 pages, 2020.

“Hot Spots Properties of a Sample of 98 Fanaroff-Riley II Radio Sources,” Fernini, I., & Eckart, A., *Proceedings of First Sharjah International Conference on Particle Physics, Astrophysics and Cosmology (FISICPAC)*, IOP Conf. Series: Journal of Physics: Conf. Series 1258 (2019) 012022, doi: 10.1088/1742-6596/1258/012022

“The UAEMMN: A prominent meteor monitoring system in the Gulf Region,” I. Fernini, A. Alowais, M. Talafha, M. Sharif, Y. Eisa, M. Alnaser, S. Mohammad, A. Hassan, I. Abujami, R. Fernini, and S. Subhi, *MeteorNews*, Vol. 4, Issue 5, pp. 275-276, 2019

“Unification of Fanaroff-Riley II Radio Sources with $0.1 < z < 2.0 - 8.4$ GHz VLA Observations of 15 Sources – Final Sample”, I. Fernini, *J. Phys.: Conf. Ser.* 1269 012009, 2019

“Sharjah Investment in the UAE Space Sector,” I. Fernini, *J. Phys.: Conf. Ser.* 1269 012003, 2019

“VLA Observations of 20 FR II Radio Sources at 8.4 GHz,” I. Fernini, *Astrophys Space Sci* (2019) 364: 167. <https://doi.org/10.1007/s10509-019-3654-5>

“Space Technology Capacity Building in Support of SDG 2030 through CubeSat Sharjah-Sat-1,” A. R. Aslan, H. M.K. Al-Naimiy, I. Fernini, A. Manousakis, M. Shaikh, S. R. Madara, T. Al-Kaabi, B. Karabulut, O. Oztekin, S. Turkoglu & E. Kalemci, *Recent Advances in Space Technologies*, Jun. 11-14, Istanbul, 2019

“Building an Artificial Martian Atmosphere,” M. Al-Qasemi, M. Al-Shamsi, R. Fernini, A. al-Noorani & I. Fernini, 233rd Meeting of the American Astronomical Society, American Astronomical Society (USA), 2019

“Meteorite Hunting Using Machine Learning and UAVs,” K. Hassan, M. Abdisalam, T. Dawdi, Y. Elkalyoubi & I. Fernini, 7th Undergraduate Research Competition (Abu-Dhabi Univ., UAE), 2019

“UAE Meteor Monitoring Network,” A. Ahmad, M. Alnaser, S. Zarafshan & I. Fernini, 7th Undergraduate Research Competition (Abu-Dhabi Univ., UAE), 2019

“SHARJAH-SAT-1 CubeSat,” A. Ruhi, M. Musharraf & I. Fernini, 7th Undergraduate Research Competition (Abu-Dhabi Univ., UAE), Apr. 2019

“Longitudinal Variability Study of Ionospheric Ranging Errors Around 20° N Geomagnetic Latitude.” Darya A. M., Shaikh M. M., and Fernini I. 6th IEEE Int. Conf. on Space Science and Communication (ICONSPACE) 2019, Johor Bahru, Johor, Malaysia.

“Environmental Monitoring using CanSat,” Y. M. Faroukh, A. Alhammadi, A. Al-Ali, A. O. Adwan, A. M. Faroukh, M. M. Shaikh, I. Fernini, 6th International Conference on Space Science and Communication, IEEEExplore Digital Library, 2019

“Variation of Ionospheric Range Errors for L1 frequency GPS users during 23rd solar cycle”, Darya A. M., Shaikh M. M., Fernini I. *Advances in Space Research*, Vol. 64, Issue 5, pp. 1034-1045, 2019

“Building a Decametric Radio Telescope Array,” A. Alhameed, M. Abdelsalam, D. Nouichi, I. Fernini, H. Al Naimiy, I. Abujami, R. Misbahulhaque, M. Rihan and M. Talafha, *Journal of Instrumentation*, 14, P08022, 2019

“Comparative Planetology of Martian Ionosphere.” Alameri N.A., Shaikh M. M., and Fernini I. 70th International Astronautical Congress 2019, Washington D.C., USA.

“Astronomical Handbook 2019”, I. Fernini, SAASST Publications, 200 pages, 2019.

“Analysis of Space Debris Re-Entry over the Arabian Peninsula (2004 to 2018),” A. M. Darya and I. Fernini, *2018 International Conference on Signal Processing and Information Security (ICSPIS)*, IEEE Xplore, DOI: 10.1109/CSPIS.2018.8642726, 2018

“Environmental Monitoring using CanSat,” Y. M. Faroukh, A. Al-Hammadi¹, A. A. M. A. Al-Ali, R. A. S. A. Al-Yammahi, M. M. Shaikh, and **I. Fernini**, 6th UAE Undergraduate Research Competition, 2018.

“Building An Artificial Martian Atmosphere,” M. Al-Shamsi, M. Al-Qasemi, R. Fernini, A. Noorani, and **I. Fernini**, 6th UAE Undergraduate Research Competition, 2018.

“Effects of 23rd Solar Cycle on TEC Measurement over Bahrain - A Case Study”, A. M. Darya, M. M. Shaikh, and **I. Fernini**, *Advances in Science and Engineering Technology Multi-Conference (ASET'18)*, IEEEExplore, DOI: 10.1109/ICASET.2018.8376814, 2018

“Evaluation of Geomagnetic Storms - A Case Study,” W. F. Al-Sadoon, M. M. Shaikh, and **I. Fernini**, *Aviation and Space Technology International Conference, Advances in Science and*

Engineering Technology Multi-Conference (ASET'18), IEEEExplore , DOI: 10.1109/ICASET.2018.8376812, 2018.

"Astronomical Handbook 2018", I. Fernini, SAASST Publications, 200 pages, 2018.

"Modern Foundation of Astronomy," **Fernini, I.**, Noor Publishing Co. (Ger.), ISBN: 978-3-330-85021-7, 2017, 213 pages.

"Hijri Calendar 1437 AH / 2015-2016 Astronomy Almanac," Al-Naimiy, H.M., **Fernini, I.**, and Sakhr S., Emirates Heritage Club, 232 pages, 2015.

"Hijri Calendar 1436 AH / 2014-2015 Astronomy Almanac," Al-Naimiy, H.M., **Fernini, I.**, and Sakhr S., Emirates Heritage Club, 232 pages, 2014.

"VLA Images at 8.4 GHz of 40 Fanaroff-Riley II 3CR Radio sources with $0.1 < z < 2.0$," **Fernini, I.**, *Astrophysical Journal Supplement Series*, 212, 19, 2014.

"Hijri Calendar 1435 AH / 2013-2014 Astronomy Almanac," Al-Naimiy, H.M., **Fernini, I.**, and Sakhr S., Emirates Heritage Club, 232 pages, 2013.

"Hijri Calendar 1434 AH / 2012-2013 Astronomy Almanac," Al-Naimiy, H.M., **Fernini, I.**, and Sakhr S., Emirates Heritage Club, 232 pages, 2013.

"High-Resolution VLA Observations of FR II Radio Galaxies and Quasars at 3.6 cm," **Fernini, I.**, Proc. of the 2nd Middle-East and Africa Regional IAU Meeting, Cape Town, South Africa, 10-15 April 2011, *African Skies*, No. 16, 56-58, 2012.

"Hijri Calendar 1433 AH / 2012 Astronomy Almanac," Al-Naimiy, H.M., **Fernini, I.**, and Sakhr S., Emirates Heritage Club, 2012, 232 pages.

"Astronomy at the Service of the Islamic Society," Fernini, I., "The Role of Astronomy in Society and Culture," *Proceedings of the International Astronomical Union Symposium 260*, eds. D. Valls-Gabaud & A. Boksenberg, Vol. 5, 514-521, 2011.

"Hijri Calendar 1432 AH / 2011 Astronomy Almanac," Al-Naimiy, H.M., **Fernini, I.**, and Sakhr S., Emirates Heritage Club, 232 pages, 2011.

"Hot Spots in FR II Radio Galaxies and Quasars with $0.1 < z < 2.0$," **Fernini, I.**, Bull. American Astron. Soc., 42, 2010.

"Hijri Calendar 1431 AH / 2010 Astronomy Almanac," Al-Naimiy, H.M., **Fernini, I.**, and Sakhr S., Emirates Heritage Club, 232 pages, 2010.

"Hijri Calendar 1430 AH," Al-Naimiy, H.M., **Fernini, I.**, and Sakhr S., Emirates Heritage Club, 229 pages, 2009.

"Hijri Calendar 1429 AH," Al-Naimiy, H.M., **Fernini, I.**, and Sakhr S., Emirates Heritage Club, 229 pages, 2008.

"Multi-Wavelength Observations of FR II Radio Galaxies and Quasars," **Fernini, I.**, Proceedings of the Extragalactic Jets Conference: From Radio to Gamma-Rays (Girdwood, USA), eds. T.A. Rector & D. S. de Young, ASP Conf. Series Vol. 386, 120, 2008.

"8.4 GHz High-Resolution Observations of Fanaroff-Riley II 3CR Radio Sources with $0.3 < z < 2.0$. II. Ten New Images," **Fernini, I.**, *Astronomical Journal*, Vol. 134, No. 1, 158, 2007.

"Teaching Astronomy to Non-Science Majors," **Fernini, I.**, Proceedings of the Third Annual Conference for Middle East Teachers of Science, Mathematics, and Computing, Eds. Stewart, S. M. & et al., Abu-Dhabi (UAE), 153, 2007.

"Astronomical Crescent Visibility Criteria," **Fernini, I.**, Proceedings of the First Emirates Astronomical Conference, Applications of Astronomical Calculations, Eds. Guessoum, N. & Odeh, M., Center for Documentation and Research, Abu-Dhabi (UAE), 29, 2007.

"Hot Spots Position as an Orientation Indicator in FRII's Radio Galaxies and Quasars," **Fernini, I.**, The Eighth Annual U.A.E. University Research Conference, 322-327, 2007.

"Yallop's Criterion as a Test for the Earliest Crescent Visibility," **Fernini, I.**, The Eighth Annual U.A.E. University Research Conference, 328-344, 2007.

"Hijri Calendar 1428 AH," Al-Naimiy, H.M., **Fernini, I.**, and Sakhr S., Emirates Heritage Club, 227 pages, 2007.

"Hot Spots Analysis in FR II 3CR Radio Sources with $0.3 < z < 2.0$," **Fernini, I.**, The Seventh Annual U.A.E. University Research Conference, 181-186, 2006.

"Edged and Recessed Hot Spot in FR II 3CR Radio Sources with $z > 0.3$," **Fernini, I.**, *Bull. American Astron. Soc.*, 38, 194, 2006.

"Hijri Calendar 1427 AH," Al-Naimiy, H.M., **Fernini, I.**, and Sakhr S., Emirates Heritage Club, 212 pages, 2006.

"8.4 GHz High-Resolution Observations of Fanaroff-Riley II 3CR Radio Sources with $0.3 < z < 2.0$. II. Ten New Images," **Fernini, I.**, The Sixth Annual U.A.E. University Research Conference, 244-257, 2005.

"Hijri Calendar 1426 AH," Al-Naimiy, H.M., **Fernini, I.**, and Obeidallah, I. M., Emirates Heritage Club, 212 pages, 2005.

"Morphology, Location, and Compactness of Hot Spots in FR II Radio Galaxies and Quasars," **Fernini, I.**, *Bull. American Astron. Soc.*, 36, 690, 2004.

"Hijri Calendar 1425 AH," Al-Naimiy, H.M., **Fernini, I.**, and Obeidallah, I. M., Emirates Heritage Club, 211 pages, 2004.

"Hijri Calendar 1424 AH," Al-Naimiy, H.M., **Fernini, I.**, and Obeidallah, I. M., Emirates Heritage Club, 211 pages, 2003.

"8.4 GHz High-Resolution Observations of Five FR II 3CR Radio Sources," **Fernini, I.**, *Astronomical Journal*, 123:132-141, 2002.

"FR II Radio Galaxies and Quasars: The Depolarization Test," **Fernini, I.**, *Astronomical Journal*, 122:83-92, 2001.

"FR II Radio Galaxies and Quasars: Correlated Asymmetries and the Unification Scheme," **Fernini, I.**, *Bull. American Astron. Soc.*, 32, 1435, 2000.

"Depolarization Analysis of 13 FR II Radio Galaxies and 13 Quasars", **Fernini, I.**, *Bull. American Astron. Soc.*, 31, 1458, 1999.

"A Bibliography of Scholars in Medieval Islam", **Fernini, I.**, *Publisher: Cultural Foundation of Abu Dhabi (UAE)*, 611 pages, 1998.

"VLA Imaging of Fanaroff-Riley II 3CR Radio Galaxies: II New Images and Comparisons with 3CR Quasars", **Fernini, I.**, *Burns, J.O.*, and *Perley, R.A.*, *Astronomical Journal*, 114:2292-2312, 1997.

"VLA Imaging of Five Fanaroff-Riley II 3CR Radio Galaxies: I", **Fernini, I.**, *Burns, J.O.*, *Bridle, A.H.*, and *Perley, R.A.*, *Astronomical Journal*, 105:1690-1709, 1993

"Artificially-Generated Atmosphere near a Lunar Base", *Burns, J.O.*, **Fernini, I.**, *Sulkamen, M.*, *Duric, N.*, *Taylor, J.*, and *Johnson, S.*, *Lunar Bases and Space Activities in the 21st Century, Vol. I*, 347-350, *NASA, Johnson Space Center*, 1992.

"Depolarization Asymmetry in the Quasar 3C 47", **Fernini, I.**, *Leahy, J.P.*, *Burns, J.O.*, and *Basart, J.P.*, *Astrophysical Journal*, 381:63-71, 1991.

"Dispersal of Gases Generated near a Lunar Outpost," **Fernini, I.**, *Burns, J.O.*, *Taylor, J.*, *Sulkamen, M.*, *Duric, N.*, and *Johnson, S.*, *Journal of Spacecraft and Rockets*, Vol. 27, No, 5, 527-538, 1990.

"Depolarization Asymmetry in the Quasar 3C 47," **Fernini, I.**, *Leahy, J.P.*, *Burns, J.O.* and *Basart, J.P.*, *Bull. American Astron. Soc.*, 22, 800, 1990.

"Astronomical Science from a Lunar Base," *Duric, N.*, **Fernini, I.**, and *Burns, J.O.*, *Engineering, Construction, and Operations in Space II; Proc. of Space 90, The Second International Conference, Albuquerque, NM, Apr. 22-26, 1990, Vol. 1, New York, American Society of Civil Engineers*, 666-676, 1990.

"Correction Scheme for Polarized Intensity," *Leahy, J.P.*, and **Fernini, I.**, *Very Large Array Scientific Memorandum, No.161, NRAO*, 1989.

"Site Selection Criteria for Astronomical Observatories on the Moon," *Taylor, G.J.*, *Burns, J.O.*, **Fernini, I.** and *Johnson, S.*, *2nd Conference on Lunar Bases and Space Activities of the 21st Century, Houston (USA)*, 238, 1988.

"Artificially-Generated Atmosphere near a Lunar Base," *Burns, J.O.*, **Fernini, I.**, *Sulkamen, M.*, *Taylor, G.J.*, and *Johnson, S.*, *2nd Conference on Lunar Bases and Space Activities of the 21st Century, Houston (USA)*, 42, 1988.

BOOKS UNDER EDITING:

“The Solar System,” *Fernini, I., 250 pages, under editing*

“Stars,” *Fernini, I., 300 pages, under preparation.*