



Sistema Integral de Información Académica
Coordinación de Planeación, Evaluación y
Simplificación de la Gestión Institucional
Reporte individual



ABEL BERNAL BEJARLE

Datos Generales

Nombre: ABEL BERNAL BEJARLE

Máximo nivel de estudios: PASANTE

Antigüedad académica en la UNAM: 36 años

Nombramientos

Vigente: TECNICO ACADEMICO TITULAR A TC Definitivo
Instituto de Astronomía
Desde 01-03-2020

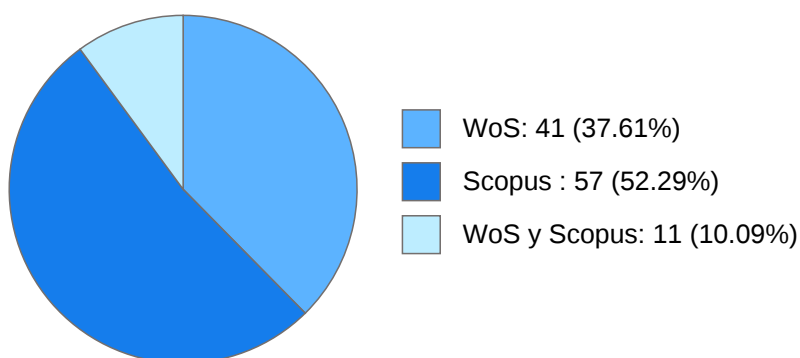
Estímulos, programas, premios y reconocimientos

PRIDE C - 2024
ESPECIALES HAROLD JOHNSON 2011 - 2012
ESPECIALES HAROLD JOHNSON 2009 - 2010

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DOCUMENTOS EN REVISTAS

Histórico de Documentos



#	Título	Autores	Revista	Año
1	A measurement of the all-particle energy spectrum of cosmic rays from 1013 to 1015eV using HAWC	JOSE RUBEN ALFARO MOLINA DANIEL OMAR AVILA ROJAS ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	ASTROPARTICLE PHYSICS	2025
2	Absence of TeV halos around millisecond pulsars	JOSE RUBEN ALFARO MOLINA DANIEL OMAR AVILA ROJAS ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	PHYSICAL REVIEW D	2025
3	Extended TeV Halos May Commonly Exist around Middle-Aged Pulsars	JOSE RUBEN ALFARO MOLINA DANIEL OMAR AVILA ROJAS ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	PHYSICAL REVIEW LETTERS	2025
4	TeV Analysis of a Source-rich Region with the HAWC Observatory: Is HESS J1809-193 a Potential Hadronic PeVatron?	RUBEN ALFARO QUIZA DANIEL OMAR AVILA ROJAS ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	ASTROPHYSICAL JOURNAL	2024
5	Performance of the HAWC Observatory and TeV Gamma-Ray Measurements of the Crab Nebula with Improved Extensive Air Shower Reconstruction Algorithms	JOSE RUBEN ALFARO MOLINA DANIEL OMAR AVILA ROJAS ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	ASTROPHYSICAL JOURNAL	2024

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6	Observation of the Galactic Center PeVatron beyond 100 TeV with HAWC	JOSE RUBEN ALFARO MOLINA DANIEL OMAR AVILA ROJAS ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	ASTROPHYSICAL JOURNAL LETTERS	2024
7	Multiwavelength Investigation of γ -Ray Source MGRO J1908+06 Emission Using Fermi-LAT, VERITAS and HAWC	JOSE RUBEN ALFARO MOLINA DANIEL OMAR AVILA ROJAS ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	ASTROPHYSICAL JOURNAL	2024
8	Testing the molecular cloud paradigm for ultra-high-energy gamma ray emission from the direction of SNR G106.3+2.7	JOSE RUBEN ALFARO MOLINA DANIEL OMAR AVILA ROJAS ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	ASTRONOMY & ASTROPHYSICS	2024
9	Precise Measurements of TeV Halos around Geminga and Monogem Pulsars with HAWC	JOSE RUBEN ALFARO MOLINA DANIEL OMAR AVILA ROJAS ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	ASTROPHYSICAL JOURNAL	2024
10	The Southern Wide-field Gamma-ray Observatory	JOSE RUBEN ALFARO MOLINA ROBERTO ARCEO REYES ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	36TH INTERNATIONAL COSMIC RAY CONFERENCE, ICRC2019	2024
11	Low-cost Oceanographic Buoy for Evaluating the Mechanical Resistance of a Water Cherenkov Detector to be deployed on a high-altitude Natural Lake in Perú	JOSE RUBEN ALFARO MOLINA ROBERTO ARCEO REYES ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	36TH INTERNATIONAL COSMIC RAY CONFERENCE, ICRC2019	2024
12	Estimating the potential of SWGO to measure the composition-dependent behaviour of the CR anisotropy	JOSE RUBEN ALFARO MOLINA ROBERTO ARCEO REYES ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	36TH INTERNATIONAL COSMIC RAY CONFERENCE, ICRC2019	2024
13	Beyond the Standard Model with SWGO	JOSE RUBEN ALFARO MOLINA ROBERTO ARCEO REYES ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	36TH INTERNATIONAL COSMIC RAY CONFERENCE, ICRC2019	2024
14	Manufacture Details of a SWGO Double-Layer Tank Design - Water Cherenkov Detector Prototype	JOSE RUBEN ALFARO MOLINA ROBERTO ARCEO REYES ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	36TH INTERNATIONAL COSMIC RAY CONFERENCE, ICRC2019	2024

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15	Updates on the Lake Design for SWGO	JOSE RUBEN ALFARO MOLINA ROBERTO ARCEO REYES ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	36TH INTERNATIONAL COSMIC RAY CONFERENCE, ICRC2019	2024
16	Sb for gamma / hadron separation in SWGO	LUKAS NELLEN FILLA JOSE RUBEN ALFARO MOLINA ROBERTO ARCEO REYES et al.	36TH INTERNATIONAL COSMIC RAY CONFERENCE, ICRC2019	2024
17	Status of the SWGO air shower reconstruction using a template-based likelihood method	JOSE RUBEN ALFARO MOLINA ROBERTO ARCEO REYES ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	36TH INTERNATIONAL COSMIC RAY CONFERENCE, ICRC2019	2024
18	Search for dark matter gamma-ray emission from the Andromeda Galaxy with the High-Altitude Water Cherenkov Observatory (vol 06, 043, 2018)	ABEL BERNAL BEJARLE SIMONE DICHARA OLIVIA LIZETH ENRIQUEZ RIVERA et al.	JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS	2019
19	Search for dark matter gamma-ray emission from the Andromeda Galaxy with the High-Altitude Water Cherenkov Observatory	DANIEL OMAR AVILA ROJAS ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO ABEL BERNAL BEJARLE et al.	JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS	2018
20	Multimessenger observations of a flaring blazar coincident with high-energy neutrino IceCube-170922A	JOSE RUBEN ALFARO MOLINA DANIEL OMAR AVILA ROJAS ANA DELIA BECERRIL REYES et al.	Science	2018
21	Observation of Anisotropy of TeV Cosmic Rays with Two Years of HAWC	JOSE RUBEN ALFARO MOLINA DANIEL OMAR AVILA ROJAS ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	ASTROPHYSICAL JOURNAL	2018
22	VERITAS and Fermi-LAT Observations of TeV Gamma-Ray Sources Discovered by HAWC in the 2HWC Catalog	DANIEL OMAR AVILA ROJAS ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO ABEL BERNAL BEJARLE et al.	ASTROPHYSICAL JOURNAL	2018
23	Kinematics and dynamics of the luminous infrared galaxy pair NGC5257/58 (Arp 240)	MARGARITA EUGENIA DEL SOCORRO ROSADO SOLIS ABEL BERNAL BEJARLE I. Fuentes-Carrera et al.	ASTRONOMY & ASTROPHYSICS	2018
24	Dark Matter Limits from Dwarf Spheroidal Galaxies with the HAWC Gamma-Ray Observatory	JOSE RUBEN ALFARO MOLINA DANIEL OMAR AVILA ROJAS ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	ASTROPHYSICAL JOURNAL	2018

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25	A search for dark matter in the Galactic halo with HAWC	JOSE RUBEN ALFARO MOLINA DANIEL OMAR AVILA ROJAS ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS	2018
26	Monitoring at TeV energies with M@TE	JOSE RUBEN ALFARO MOLINA ABEL BERNAL BEJARLE FERNANDO GARFIAS MACEDO et al.	36TH INTERNATIONAL COSMIC RAY CONFERENCE, ICRC2019	2017
27	Monitoring at TeV energies with M@TE	JOSE RUBEN ALFARO MOLINA ABEL BERNAL BEJARLE FERNANDO GARFIAS MACEDO et al.	36TH INTERNATIONAL COSMIC RAY CONFERENCE, ICRC2019	2017
28	The 2HWC HAWC Observatory Gamma-Ray Catalog	JOSE RUBEN ALFARO MOLINA ANA DELIA BECERRIL REYES ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	ASTROPHYSICAL JOURNAL	2017
29	The HAWC Real-time Flare Monitor for Rapid Detection of Transient Events	JOSE RUBEN ALFARO MOLINA DANIEL OMAR AVILA ROJAS ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	ASTROPHYSICAL JOURNAL	2017
30	Multi-messenger Observations of a Binary Neutron Star Merger	VAHRAM CHAVUSHYAN DEBORA DULTZIN KESSLER DAVID SALOME HIRIART GARCIA et al.	ASTROPHYSICAL JOURNAL LETTERS	2017
31	Multiwavelength follow-up of a rare IceCube neutrino multiplet	ABEL BERNAL BEJARLE ALEJANDRO LARA SANCHEZ Aartsen, M. G. et al.	ASTRONOMY & ASTROPHYSICS	2017
32	SEARCH FOR TeV GAMMA-RAY EMISSION FROM POINT-LIKE SOURCES IN THE INNER GALACTIC PLANE WITH A PARTIAL CONFIGURATION OF THE HAWC OBSERVATORY	JOSE RUBEN ALFARO MOLINA ANA DELIA BECERRIL REYES ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	ASTROPHYSICAL JOURNAL	2016
33	Dark matter equation of state from rotational curves of galaxies	ABEL BERNAL BEJARLE DARIO NUÑEZ ZUÑIGA Barranco, J.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2015
34	VAMOS: A pathfinder for the HAWC gamma-ray observatory	JOSE RUBEN ALFARO MOLINA JESUS ALVAREZ CASTILLO FERNANDO ANGELES URIBE et al.	ASTROPARTICLE PHYSICS	2015

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35	NEFER, a high resolution fabry-perot spectrometer	ABEL BERNAL BEJARLE MARGARITA EUGENIA DEL SOCORRO ROSADO SOLIS LUIS ARTEMIO MARTINEZ VAZQUEZ et al.	REVISTA MEXICANA DE ASTRONOMIA Y ASTROFISICA, SERIE DE CONFERENCIAS	2013
36	The high altitudewater Cerenkov (HAWC) TeV gamma ray observatory	SAUL AGUILAR SALAZAR JOSE RUBEN ALFARO MOLINA ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO et al.	Astrophysics and Space Science Proceedings	2013
37	A water quality monitoring system for HAWC	FERNANDO GARFIAS MACEDO ABEL BERNAL BEJARLE SILVIO JORGE TINOCO PUERTO et al.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2012
38	Analog front end board electronics proposal for the HAWC observatory	ABEL BERNAL BEJARLE	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2012
39	On the sensitivity of the HAWC observatory to gamma-ray bursts	SAUL AGUILAR SALAZAR JOSE RUBEN ALFARO MOLINA ERICK JONATHAN ALMARAZ AVIÑA et al.	ASTROPARTICLE PHYSICS	2012
40	On the mass of ultra-light bosonic dark matter from galactic dynamics	JUAN ALDEBARAN MAGAÑA ZAPATA ABEL BERNAL BEJARLE FRANCISCO JAVIER SANCHEZ SALCEDO et al.	JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS	2012
41	Virtual reality and project management for astronomy	LUIS ARTEMIO MARTINEZ VAZQUEZ JOSE LUIS VILLARREAL BENITEZ FERNANDO ANGELES URIBE et al.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2010

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42	A virtual reality environment for telescope operation	LUIS ARTEMIO MARTINEZ VAZQUEZ JOSE LUIS VILLARREAL BENITEZ FERNANDO ANGELES URIBE et al.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2010
43	NEFER: A high-resolution scanning Fabry-Perot Spectrograph II scanning Fabry-Perot testing	ABEL BERNAL BEJARLE MARGARITA EUGENIA DEL SOCORRO ROSADO SOLIS LUIS ARTEMIO MARTINEZ VAZQUEZ et al.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2010
44	A high altitude Mexican ACT project, OMEGA	JOSE RUBEN ALFARO MOLINA ERNESTO JOSE MARIA DE LA SALETE BELMONT MORENO ABEL BERNAL BEJARLE et al.	31st International Cosmic Ray Conference, Icrc 2009	2009
45	NEFER: A high resolution scanning Fabry-Perot spectrograph	MARGARITA EUGENIA DEL SOCORRO ROSADO SOLIS ABEL BERNAL BEJARLE LUIS ARTEMIO MARTINEZ VAZQUEZ et al.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2008
46	A DSP-based infrared and optical bidimensional detectors controller	ARTURO ISMAEL IRIARTE VALVERDE LUIS ARTEMIO MARTINEZ VAZQUEZ ABEL BERNAL BEJARLE et al.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2008
47	Tonantzintla's observatory astronomy teaching laboratory project	FERNANDO GARFIAS MACEDO ABEL BERNAL BEJARLE LUIS ARTEMIO MARTINEZ VAZQUEZ et al.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2008

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48	Virtualization as an alternative for astronomical software integration	LUIS ARTEMIO MARTINEZ VAZQUEZ ABEL BERNAL BEJARLE FERNANDO GARFIAS MACEDO	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2008
49	A high resolution scanning Fabry-perot for osiris	ABEL BERNAL BEJARLE MARGARITA EUGENIA DEL SOCORRO ROSADO SOLIS LUIS ARTEMIO MARTINEZ VAZQUEZ	REVISTA MEXICANA DE ASTRONOMIA Y ASTROFISICA, SERIE DE CONFERENCIAS	2007
50	CATAVIÑA: New infrared camera for OAN-SPM	ARTURO ISMAEL IRIARTE VALVERDE IRENE ANTONIA CRUZ GONZALEZ ESPINOSA LUIS ARTEMIO MARTINEZ VAZQUEZ et al.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2006
51	Active remote observing system for the 1-m telescope at Tonantzintla observatory	ABEL BERNAL BEJARLE LUIS ARTEMIO MARTINEZ VAZQUEZ FERNANDO GARFIAS MACEDO et al.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2006
52	The isolated interacting galaxy pair NGC 5426/27 (Arp 271)	ISAURA LUISA FUENTES CARRERA MARGARITA EUGENIA DEL SOCORRO ROSADO SOLIS IRENE ANTONIA CRUZ GONZALEZ ESPINOSA et al.	ASTRONOMY & ASTROPHYSICS	2004
53	Multitemporal land-cover classification of Mexico using Landsat MSS imagery	ROMAN ALVAREZ BEJAR ROBERTO BONIFAZ ALFONZO GILBERTO CARLOS GOMEZ REYES et al.	INTERNATIONAL JOURNAL OF REMOTE SENSING	2003
54	Destruction of the environment of the BN-KL nebula	LUIS SALAS CASALES MARGARITA EUGENIA DEL SOCORRO ROSADO SOLIS IRENE ANTONIA CRUZ GONZALEZ ESPINOSA et al.	ASTROPHYSICAL JOURNAL	1999

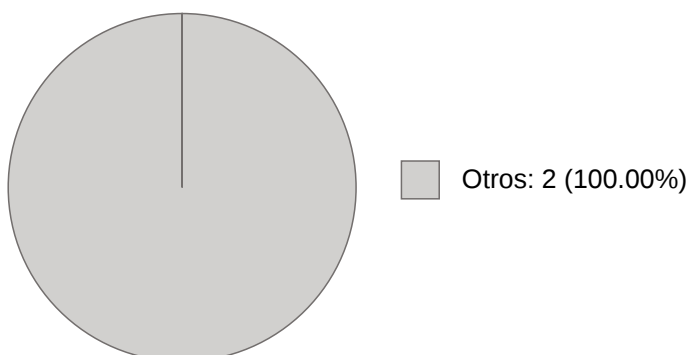
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55	PUMILA: A near-infrared spectrograph for the kinematic study of the interstellar medium	MARGARITA EUGENIA DEL SOCORRO ROSADO SOLIS IRENE ANTONIA CRUZ GONZALEZ ESPINOSA LUIS SALAS CASALES et al.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	1998
56	PUMA: The first results of a nebular spectrograph for the study of the kinematics of interstellar medium	ROSALIA LANGARICA LEBRE ABEL BERNAL BEJARLE MARGARITA EUGENIA DEL SOCORRO ROSADO SOLIS et al.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	1998
57	Remote control for the OAN 1 m telescope at Tonantzintla, Puebla	ABEL BERNAL BEJARLE BEATRIZ SANCHEZ Y SANCHEZ ARTURO ISMAEL IRIARTE VALVERDE	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	1998

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LIBROS Y CAPITULOS CON ISBN

Obras con registro ISBN

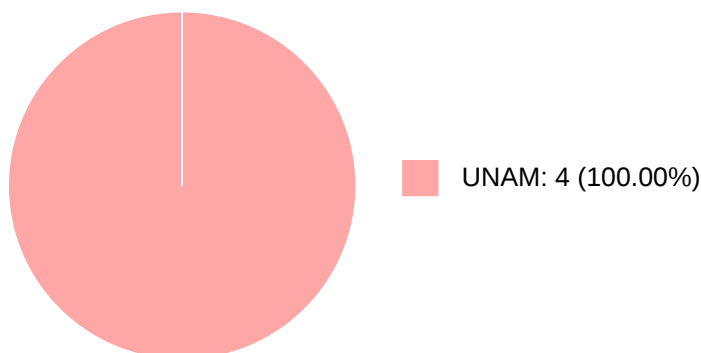


#	Título	Autores	Alcance	Año	ISBN
1	Relevance of the infrastructure in laboratories and manufacturing workshops for the integration and validation of astronomical instruments	ANA CAROLINA KEIMAN FREIRE ALEJANDRO FARAH SIMON LUIS CARLOS ALVAREZ NUÑEZ et al.	Conferenc e Paper	2024	9781510675230
2	Post-classification digital change detection analysis of a temperate forest in the southwest basin of Mexico City, in a 16-year span	MARIA CONCEPCION GARCIA AGUIRRE ROMAN ALVAREZ BEJAR ABEL BERNAL BEJARLE et al.	Conferenc e Paper	2005	0780391187

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PARTICIPACIÓN EN PROYECTOS

Histórico de participación en proyectos



#	Nombre	Participantes	Fuente	Fecha inicio	Fecha fin
1	Controlador CS100-PUMA.	MARGARITA EUGENIA DEL SOCORRO ROSADO SOLIS ABEL BERNAL BEJARLE	Presupuesto de la UNAM asignado a la Dependencia	01-01-2019	31-12-2021
2	NEFER instrumento para OSIRIS del GTC (segunda etapa).	MARGARITA EUGENIA DEL SOCORRO ROSADO SOLIS ABEL BERNAL BEJARLE	Presupuesto de la UNAM asignado a la Dependencia	01-01-2020	31-12-2021
3	Ocelotl, Interferometria Fabry-Perot para Tonantzintla.	MARGARITA EUGENIA DEL SOCORRO ROSADO SOLIS ABEL BERNAL BEJARLE	Presupuesto de la UNAM asignado a la Dependencia	01-04-2023	31-12-2025
4	Sistema de Control del Telescopio de 1m.	ABEL BERNAL BEJARLE	Presupuesto de la UNAM asignado a la Dependencia	01-01-2019	31-12-2025



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PARTICIPACIÓN EN TESIS

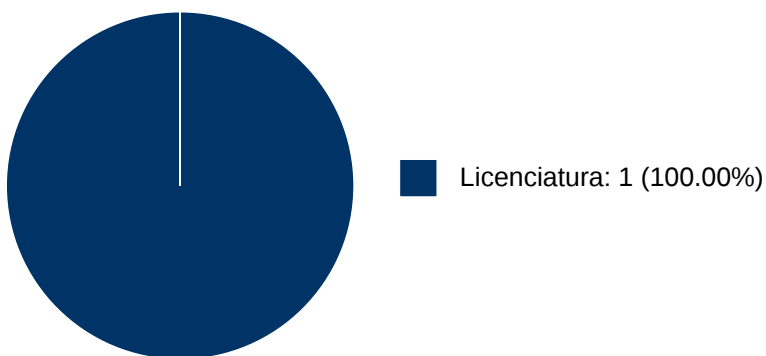
No se encuentran registros en la base de datos de TESIUNAM asociados a:

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DOCENCIA IMPARTIDA

Histórico de docencia



#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Licenciatura	NEGOCIACION Y RESOLUC.CONFLICTOS	Centro Peninsular en Humanidades y Ciencias Sociales en Mérida, Yucatán	12	2015-1



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PATENTES

No se encuentran registros en la base de datos de patentes asociados a:

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FUENTES DE INFORMACIÓN

Internos

#	Información	Fuente	Sistema	Periodo
1	Grupos ordinarios y resumen de historias académicas	DGAE	SIAE	2008-2025
2	Nombramientos, datos generales, estímulos, premios y reconocimientos	DGAPA	RUPA	2008-2025
3	Producción Académica	CH	Humanindex	2008-2021
4	Producción Académica	CIC	SCIC	2000-2017
5	Proyectos	DGPO	SISEPRO	2018-2022
6	Tesis	DGB	TESIUNAM	2008-2025
7	Tutorías en Posgrado	CGEP	SIIPosgrado	2008-2021

Externos

#	Información	Fuente	Sistema	Periodo
8	Documentos Indexados	Elsevier	Scopus	2008-2025
9	Documentos Indexados	Thomson Reuters	WoS	2008-2025
10	Obras con registro ISBN	INDAUTOR	Agencia ISBN	2008-2025
11	Patentes	IMPI	SIGA	2008-2024