

## **IBEROAMERICAN PAN PACIFIC INTERNATIONAL CONFERENCE ON TOPOLOGY AND APPLICATIONS**

**It will take place from Monday 11 to Thursday 14 September 2023.**

**It will take place at the facilities of the Meritorious Autonomous University of Puebla (Carolino Building and Faculty of Philosophy and Litterture, and Emiliano Zapata High School) in the City of Puebla, Pue., Mexico.**

**Congress websites: <https://sites.google.com/izt.uam.mx/citaandppicta2023/>**

**and**

**<https://luisenriquegudo.wixsite.com/iberoamericanpanpaci>**

The congress will consist of 9 parallel sessions, one for each area of knowledge into which the congress has been divided, with conferences both face-to-face and online, and there will be 9 Plenary Conferences, one for each session. An attendance of 120 researchers from different parts of the world, and 40 postgraduate and undergraduate students from Mexican universities is expected. This means that approximately 200 people will attend between participants and companions (these calculations are made based on the average attendance at these congresses). It is estimated that there will be 170 conferences, of which 90 will be face-to-face and 80 will be online.

The memories of this congress will be published by the prestigious magazine Topology and its Applications, North Holland, in a special issue dedicated to IPPICTA-2023. This issue will publish those works presented at the congress that approve the high academic level that this journal demands from its authors.

Invited talks will last 50 minutes and on-demand talks will last 20 minutes. In both, an additional 5 minutes will be given for questions and doubts.

☐ **Registration Fee: 100 dollars**

☐ **Registration Fee for online talk: 50 dollars**

We encourage people to pay the registration fee at the REGISTRATION DESK (either dollars or mexican pesos). People who want or must pay on line please follow the instructions:

**PAYMENT ON LINE OUTSIDE OF MEXICO:** To pay the online registration fee on line out of Mexico, please make a bank transfer with the following information and send a copy of the payment to Adriana Briseño ([adriana@matmor.unam.mx](mailto:adriana@matmor.unam.mx))

**BANK NAME:** J.P. MORGAN CHASE BANK N.A.

**NAME OF ACCOUNT HOLDER:** UNIVERSIDAD NACIONAL AUTONOMA DE MÉXICO

**ACCOUNT NUMBER:** 101693118

**SWIFT/CODE:** CHASUS33

**ABA CODE:** 111000614

**ADDRESS OF ACCOUNT HOLDER:** TEXAS 20855 STONE OAK PKWY, SAN ANTONIO, TX 78258

**Note:** We are taking into account the commissions charged by the bank.

**PAYMENT ON LINE INSIDE OF MEXICO:** The participants who want to pay in Mexican pesos on line inside of Mexico please contact directly Adriana Briseño ([adriana@matmor.unam.mx](mailto:adriana@matmor.unam.mx)) to get the information of payment.

**REQUIREMENT OF A "FACTURA" (RECEIPT)** without regarding the method of payment either on line or at the registration desk. If you need it please contact Adriana Briseño ([adriana@matmor.unam.mx](mailto:adriana@matmor.unam.mx)).

STUDENTS will not pay registration provided that they present either a talk in person, online or a poster.

## **Deadlines**

□ The deadline for registration is August 15th, 2023

□ The deadline for sending the Abstract is August 15th, 2023

## **Main Speakers:**

Rosana Rodríguez López, (Universidad de Santiago de Compostela), rosana.rodriguez.lopez@usc.es

□ Natalia Jonard Pérez, (Facultad de Ciencias, Universidad Nacional Autónoma de México), nat@ciencias.unam.mx, **Geometric Topology**

□ Mauricio Esteban Chacón Tirado, (Facultad de Ciencias Fisico Matematicas, Benemerita Universidad Autónoma de Puebla), maeschacon@fcfm.buap.mx, **Continuum Theory**

□ Omar Antolín Camarena, (Instituto de Matemáticas, Universidad Nacional Autónoma de México), omar@matem.unam.mx

□ Fabiola Manjarrez Gutiérrez, (Instituto de Matemáticas, Universidad Nacional Autónoma de México, Cuernavaca), fabiola.manjarrez@im.unam.mx

Michael Hrušák, (Universidad Nacional Autónoma de México), michael@matmor.unam.mx, **Set Theoretic Topology and Set Theory**

Mikhail Tkachenko, (Universidad Autónoma Metropolitana), **Topological Algebra**

Laxmi Parida , (IBM)

Christopher Mouron, **Continuum Theory**

**Session invited Speakers:**

– Wang Jiajun, Peking University (China)

– Aura Lucina Kantún Montiel, Universidad del Papaloapan, Campus Loma Bonita (México)

– Kimihiko Motegi, Nihon University, (Japan)

– Marko Stosic, Technical University of Lisbon, (Portugal)

– Lucía Junqueira, University of São Paulo, (Brasil), lucia@ime.usp.br, **Set Theoretic Topology and Set Theory**

□– Toshimichi Usuba, Waseda University, (Japan), usuba@waseda.jp, **Set Theoretic Topology and Set Theory**

– Matías Raja, **Topological Algebra**

– Li-Hong Xie, **Topological Algebra**

– Sang-Eon Han, Jeonbuk National University, (Republic of Korea)

– Jesús Rodríguez López , (España)

– Judy Kennedy, kennedy9905@gmail.com, **Continuum Theory**

– Ivon Vidal-Escobar, **Continuum Theory**

– Daria Michalik, \_\_daria.michalik@ujk.edu.pl, **Continuum Theory**

– Jorge Marcos Martínez Montejano, jorgemm@ciencias.unam.mx, **Continuum Theory**

– Yoshhiyuki Oshima, \_oshima@riko.shimane-u.ac.jp, **Continuum Theory**

– Piotr Oprocha, oprocha@agh.edu.pl, **Continuum Theory**

There will be a Poster Session with the following guidelines:

- Your abstract may be submitted **clicking on Poster Session** below.
- The author must **register before August 11, 2023.**
- The **poster session** will be held on Thursday, **September 14, 2023.**
- We recommend limiting their **size** to 32”x40” or smaller.
- The authors are responsible for printing out and bringing their own posters.

## **Passports and Visas**

Citizens of the U.S., Canada, the European Union, Japan, and some countries of Latin America are not required to obtain visas for short visits (up to 3 months) to Mexico; you will require only a valid passport and a landing card supplied by the airlines. Citizens of most other countries will require a visa obtainable at the nearest Mexican consulate or embassy. In the (unlikely) event that you have problems obtaining a visa, please notify us as soon as possible as the Benemérita Universidad Autónoma de Puebla may be able to intervene and expedite the issuance of a visa.

## **Arrival**

The two nearest airports to Puebla are Mexico City’s International Airport and Hermanos Serdán Airport in Huejotzingo, Puebla:

### **1. From International Airport of the Mexico City**

Mexico City’s International Airport (AICM) (MEX code) Puebla City lies about 130 kilometers from Benito Juárez International Airport of Mexico City, and it should not take more than two hours to travel there by car and three hours by public transportation. The following methods could be used to get to the Center of Puebla from the Mexico City International Airport.

### **o The cheapest way**

Estrella Roja provides nonstop, first-class bus service to Puebla from Mexico City, including its two terminals inside the airport. The two-hour ride, approximately, includes snack and beverage service, air conditioning, videos, on board internet access, and personalized surround system for music and/or a movie. This bus arrives at either CAPU (bus central of Puebla) or the 4 Poniente Station. We recommend you to take the bus to 4 Poniente because the taxis inside that terminal are safe and it costs approximately \$50 pesos (~2.5 dollars) to get to one of the recommended hotels. Nevertheless, you can take the bus to CAPU and take an official taxi in the stand inside the terminal. Give the dispatcher the address of the hotel, the dispatcher will charge you about \$130 pesos (~6.5 dollars) and assign you a cab number.

### **o The direct way**

You can take an authorized taxi in the Mexico City International Airport, but the cost of a trip directly to Puebla Center at the hotel you will stay is about \$2000 pesos (~100 dollars). Puebla has a small airport, called Hermanos Serdán (PBC). It is located in the nearby town of Huejotzingo, about 40 to 50 minutes from downtown Puebla. Hire an official taxi for \$400-\$450 pesos (~25 dollars) at the stand inside the terminal. The disadvantage is that all international flights come through Houston, Texas and hence there are fewer options than when flying to Mexico City.

## **2. Traveling from other states of Mexico**

If you are already in Mexico, you can take a bus that arrives to CAPU depending on the place you are. The most common lines departing from Mexico City are ADO and Estrella Roja, a detailed list of lines can be found at this link, if you are in another state

you can travel to TAPO in Mexico City and then travel to Puebla by ADO or Estrella roja.

## **Accommodation**

Benemérita Universidad Autónoma de Puebla has several special price deals with hotels in Puebla downtown. The cheapest is Hotel Gilfer; the most traditional one is Hotel Colonial. You can obtain a special rate at any of the hotels of the following list by specifying that you are attending the CIMA, organized by the Benemérita Universidad Autónoma de Puebla (BUAP).

### **□Hotel Colonial de Puebla:**

**Address:** 4 Sur 105 - Puebla, Puebla. C.P. 72000 Mexico

**Tel:** 01 (222) 246-4612 - Fax: 01 (222) 246-0818

### **□Hotel Gilfer:**

**Address:** 2 Oriente 11, Colonia Centro, C.P. 72000 Puebla

**Tel:** 01 (222) 246 0611

### **□Hotel Palacio San Leonardo:**

**Address:** Av. 2 Oriente 211, Colonia Centro, 72000 Puebla

**Tel:** 222 223 6600

Session organizers:

## 1.- Algebraic Topology

- Daniel Juan-Pineda (CCM, Morelia, Universidad Nacional Autónoma de México), [daniel@matmor.unam.mx](mailto:daniel@matmor.unam.mx)
- N. Iwase (Kyushu University), [iwase@math.kyushu-u.ac.jp](mailto:iwase@math.kyushu-u.ac.jp)
- Rita Jiménez, (Instituto de Matemáticas, Oaxaca), [rita@im.unam.mx](mailto:rita@im.unam.mx)
- Daisuke Kishimoto, (Kyushu sw Japon), [kishimoto@math.kyushu-u.ac.jp](mailto:kishimoto@math.kyushu-u.ac.jp)

## 2.- Applied Topology

- Antonio Rieser (CIMAT), [rieser@cimat.mx](mailto:rieser@cimat.mx)
- N. Selem (Universidad Nacional Autónoma de México), [nselem@matmor.unam.mx](mailto:nselem@matmor.unam.mx)
- Oscar Valero (Balearic Islands University), [o.valero@uib.es](mailto:o.valero@uib.es)
- Jiling Cao (Auckland University of Technology), [jiling.cao@auk.ac.nz](mailto:jiling.cao@auk.ac.nz)

## 3.- Continuum Theory

- Verónica Martínez de la Vega (IMATE), [vmvm@imate.unam.mx](mailto:vmvm@imate.unam.mx)
- Eiichi Matsushashi (Shimane University, Japan)
- Sina Greenwood, (Auckland University, New Zealand)
- Eiichi Matsushashi, (Shimane University, Japan)

## 4.- Dynamic Systems

- Manuel Sanchis (Universitat Jaume I), [manuel.sanchis@mat.uji.es](mailto:manuel.sanchis@mat.uji.es)
- Gerardo Acosta (Universidad Nacional Autónoma de México), [gacosta@im.unam.mx](mailto:gacosta@im.unam.mx)
- Jian Li, Shantou University, [lijian09@mail.ustc.edu.cn](mailto:lijian09@mail.ustc.edu.cn)

## 5.- Fuzzy Topology

- J. Font (Jaume I University), [font@uji.es](mailto:font@uji.es)
- Sergio Macario (Universidad Jaume I), [macario@uji.es](mailto:macario@uji.es)



□ Daniel Jardón (Universidad Autónoma de la Ciudad de México),  
daniel.jardon@uacm.edu.mx-

## **6.- Set Theoretic Topology and Set Theory**

□ Rodrigo Hernandez Gutiérrez, (Metropolitan Autonomous University),  
rod@xanum.uam.mx-

□ Reynaldo Rojas Hernández (Universidad Michoacana de San Nicolas de  
Hidalgo), satzchen@yahoo.com.mx

□ Yasunao Hattori (Shimane University), hattori@riko.shimane-u.ac.jp

□ M. Sakai (Kanagawa University), sakaim01@kanagawa-u.ac.jp

□ J. Brendle (Kobe University), joergbrendle@gmail.com

## **7.- Geometric Topology**

□ Sergey Antonyan (Faculty of Sciences, Universidad Nacional Autónoma de  
México), antonyan@unam.mx

□ A. Koyama (Waseda University), akoyama@waseda.jp

□ Zhong Qiang Yang (Minnan Normal University), zqyang@stu.edu.cn

## **8.- Low dimension topology**

□ Mario Eudave-Muñoz (Universidad Nacional Autónoma de México),  
mario@matem.unam.mx -

□ Seiichi Kamada (Osaka University), kamada@math.sci.osaka-u.ac.jp

□ Sang Youl Lee (Pusan National University), sangyoul@pusan.ac.kr

□ Marithania Silvero (Universidad de Sevilla), marithania@us.es

## **9.- Topological Algebra**

□ Iván Sánchez (Autonomous Metropolitan University of  
Mexico), isr.uami@gmail.com-

□ Jorge Galindo (Jaume I University), jgalindo@mat.uji.es

□ Fucaí Lin, Minnan Normal University, linfucai@mnnu.edu.cn

## 10.- Poster Session

□ Luis Alberto Guerrero Méndez, (Benemérita Universidad Autónoma de Puebla),  
luis.guerrero.mat@gmail.com -

## General Organizing Committee:

□ Salvador García-Ferreira (Center for Mathematical Sciences, Morelia, Universidad  
Nacional Autónoma de México), sgarcia@matmor.unam.mx,

□ Yasunao Hattori (Shimane University), hattori@riko.shimane-u.ac.jp,

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## Local Organizing Committee:

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□ María de Jesús López Toriz (mjlopez@fcfm.buap.mx).

## Logistics:

□ Adriana Briceño Chávez

**Creation and maintenance of the website:**

□ Luis Enrique Gutiérrez Domínguez (Metropolitan Autonomous University)

**Creation and edition of the special documents of the congress:**

□ Roberto Pichardo Mendoza (Universidad Nacional Autónoma de México)

□ Fernanda Barajas Hernández (Universidad Nacional Autónoma de México)

**Diffusion and connectivity Mexico-China:**

□ Victor Hugo Yañez (Institute of Mathematics, Nanjing Normal University), victoryanez@163.com

□ Zhongqiang Yang

□ Jiling Cao (Auckland University of Technology ), jiling.cao@auk.ac.nz

The congress will consist of 9 parallel sessions, one for each area of knowledge into which the congress has been divided, with conferences both face-to-face and online, and there will be 9 Plenary Conferences, one for each session. An attendance of 120 researchers from different parts of the world, and 40 postgraduate and undergraduate students from Mexican universities is expected. This means that approximately 200 people will attend between participants and companions (these calculations are made based on the average attendance at these congresses). It is estimated that there will be 170 conferences, of which 90 will be face-to-face and 80 will be online.

The memories of this congress will be published by the prestigious magazine *Topology and its Applications*, North Holland, in a special issue dedicated to IPPICTA-2023. This issue will publish those works presented at the congress that approve the high academic level that this journal demands from its authors. In addition, a special volume of the

congress will be published in the prestigious "Matemáticas y sus Aplicaciones" edited by the Faculty of Physical-Mathematical Sciences of the Meritorious Autonomous University of Puebla. So those who have presented a conference and want to publish a research article in this volume can submit it for evaluation and possible publication.

The deadline to register and submit your talk title and abstract is August 14, 2023.

The official photo of the congress will be taken at the entrance of the Carolino building on Wednesday, September 13 at 2 p.m.

### **About the event:**

In 1991 an academic project initiated by a group of Mexican and Spanish topologists was launched, which has produced many fruits. Part of this project consists of organizing a biannual congress at one of the Ibero-American universities where topology research is carried out, in order to bring together specialists from all over the world to present their research and strengthen academic relations with Ibero-American topologists. This event has been called The Iberoamerican Conference on Topology and its Applications, CITA (Iberoamerican Conference on Topology and its Applications). The first of these congresses was held in Benicassim, Spain (1995), the second in Morelia, Mexico (1997), the third in Gandía, Spain (1999), the fourth in Coimbra, Portugal (2001), the fifth in Lorca, Spain (2003), the sixth in Puebla, México (2005), the seventh in Valencia, Spain (2008), the eighth in Guanajuato, México (2012), and the ninth in Almería, Spain (2014). In the last ones of these events there has been a participation of around 150 exhibitors and up to 170 attendees from Germany, Brazil, Canada, Colombia, Spain, the United States, Hungary, England, Italy, Mexico, Poland, Portugal, Czech Republic, Russia, Venezuela. This means, in specialized mathematics

congresses, a very good attendance. In addition, an excellent academic level has been maintained.

The first Pan Pacific International Conference on Topology and Applications (PPICTA), as a follow-up to the Japan-Mexico Conference on Topology and its Applications, was held on November 25-30, 2015 at Minnan Normal University in Zhangzhou (317 attendees). The second PPICTA, organized by the Department of Mathematics, Pusan National University, was held from November 13 to 17, 2017 at Novotel Ambassador Busan, Haeundae in Busan, Republic of Korea (263 attendees). The Third Conference was held by Sichuan University from November 8 to 13, 2019 at the Xiangyu Hotel, Chengdu, China.

Due to the covid pandemic, both the Ibero-American Congress and the Pan Pacific were cancelled. Now, that somehow we have returned to a situation where the disease is more controlled and less dangerous, we have decided to combine, for this occasion, these two important events and hold them together in the beautiful BUAP facilities located in the center of the City of Puebla.

In recent years the Benemérita Universidad Autónoma de Puebla has organized several events in mathematics. Mainly the International Congress of Mathematics (CIMA); also the Summer Conference on Topology and the International Congress of Theory of Continuums. The VI Ibero-American Congress on Topology and its Applications was an outstanding event that was organized at BUAP by the BUAP topology group and related groups from UNAM and UAM.

The objectives to be achieved by holding the Iberoamerican Pan Pacific International Conference on Topology and its Applications are:

1.- Create a space conducive to exchanging the most recent ideas, techniques and results in various branches of Topology, between researchers from other foreign universities and national academics.

2.- Strengthen and extend the academic collaboration that exists, in the area of topology, between national researchers and foreign researchers, particularly Spanish, Japanese, Chinese and Korean.

3.- Promote projects for advanced students and young researchers in current lines of research.

This is intended to create a source of topics for future undergraduate and graduate theses, and research articles.

4.- Motivate students to enter postgraduate programs in the various areas covered by topology.

5.- Consolidate the prestige of the topology research groups in the country, and especially, of the BUAP.

A special issue of the IPPICTA of the prestigious magazine Topology and its Applications will be published where the main Speakers will be invited to submit a research article, and all those who wish to submit their articles to be refereed for publication. The same strict criteria for accepting articles will apply as in non-special issues.

The city of Puebla is located 132 kilometers east of Mexico City. There are buses that go from the Mexico City airport to the bus station in Puebla City. You can also fly to the city of Puebla by changing a plane in Mexico City.

The City of Puebla is one of the main colonial cities in Mexico where you can see the colonial splendor in its splendid Cathedral and in the Rosario Chapel, the pinnacle of Baroque. In addition, the City of Puebla is famous worldwide for its traditional cuisine, standing out the "Mole Poblano" and "Los Chiles en Nogada".

On September 15, some walks will be organized. There will be the possibility of visiting Cacaxtla, which was a powerful political, military and economic city whose splendor covers the years 600 to 900 of our era and which developed in the current regions of Tlaxcala and Puebla. It has some of the most extraordinary and best preserved murals in Mesoamerica. You will also visit the church of Santa María Tonantzintla, a wonderful example of indigenous architecture embodied in a colonial construction. You can also visit "El Paso de Cortés", the place where Hernán Cortés traveled to the great Tenochtitlan, capital of the Aztecs. In this place you can magnificently appreciate the two colossal volcanoes Popocatepetl and Iztaccihuatl that flank this "Paso de Cortés". On the night of September 15 you can witness and participate in the "Grito de Independencia" (Cry for Independence) in the zócalo (main public square) of the City of Puebla or in the zócalo of Mexico City. This is the most important civic event for Mexicans as it commemorates the independence of Mexico. A festival is held, with music, fireworks, and the famous "Grito de Independencia", in which the governor of Puebla and the president of the republic harangue the attendees with cheers to the heroes of independence.

Puebla de Zaragoza, officially called Heroica Puebla de Zaragoza or simply Puebla, is a Mexican metropolis, head of the municipality of Puebla, capital and most populous city of the state of Puebla, as well as the Metropolitan Area of Puebla-Tlaxcala and the fifth largest populated area of the country. The city is also known as Puebla de los Ángeles (since legend has it that it was exactly traced by angels), which is why it is also called Angelópolis. It is located in the central highlands of Mexico in the central- western part of the state, in the geographical area known as the Valley of Puebla.

Founded on April 16, 1531 as Puebla de los Ángeles and built according to the plans of Bishop Julián Garcés, it is strategically located between Mexico City and the port of Veracruz. The city is home to some of the most important samples of civil and colonial architecture, spanning periods from the Renaissance to the Neoclassical Baroque, and its historic center includes much Spanish, French and Baroque colonial architecture, which is why it is considered a World Heritage Site by the UNESCO.

The city has been the site of important events in the history of Mexico, for which these events are remembered in a very important way with the celebration of parades, events such as the battle of May 5, where the Mexican army defeated the French army, or like the combat of November 18, 1910, where the Serdán brothers (supporters of Francisco I. Madero) conspired against the government of Porfirio Díaz.

Religious festivals are also part of the culture due to the influence that the Catholic religion has had throughout the history of the city; among the main festivals are Candelaria, carnival, Easter, Corpus Christi, Santa Cruz, the day of the Virgin of Guadalupe, Christmas, the day of the Virgen del Carmen, the day of San José, the day of the Lord of Wonders, the day of Santiago Apostle, the day of the Immaculate Conception, the day of San Francisco, the day of Blessed Sebastián de Aparicio, etc.

Among its main products are textiles, ceramics (Talavera), glassware, tiles, handicrafts and processed foods. In addition, the city is par excellence a gastronomic city due to its wide range of typical foods, such as chile en nogada, chalupas, cemitas and mole poblano. The typical costume of the city is the well-known China Poblana costume.

To learn more about the City and State of Puebla visit the links:

<https://www.visitpuebla.mx>



