

**REPORT ON CONFERENCE VISIT**  
**International Congress of Mathematicians (ICM) 2018**  
**Rio De Janeiro, Brazil**  
**August 01 – 09, 2018**

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**Abstract**

This paper reports on the conference leave taken by the author to attend the International Congress of Mathematicians (ICM) 2018 that was hosted at the Riocentro Conventions & Event Center in Barra da Tijuca, Rio De Janeiro, Brazil. The highlights of the conferences are summarized; a report on discussions held and its results with possible academic links with other researchers are presented.

**1. Introduction**

The International Congress of Mathematicians (ICM) 2018 was held from 01 – 09 August, 2018. I was among the many academics invited from all over the world to attend this conference. My contributed talk was titled “*Strategic Placement of Landmarks for Parking and Obstacle Avoidances in a Partially Known Environment*”.

**2. Travel**

- ◆ **Departure from USP:** My flight was scheduled for Monday, 30<sup>th</sup> July, 2018 with transits at Auckland and Santiago airports.
- ◆ **Arrival at Rio de Janeiro:** I reached Rio de Janeiro on 31 July and stayed at the Ramada Encore Ribalta Hotel for nine nights and attended the conference on 1st to 9th August.
- ◆ **Departure from Rio de Janeiro:** The talks ended on 9th August. I departed from Rio de Janeiro on 10th August for Buenos Aires.
- ◆ **Arrival at USP:** Departed Buenos Aires on 13th August and reached Suva (via transits at Santiago and Auckland airports) on 15th August and resumed duties on the 16th.

**3. ICM 2018**

The opening of the conference and the welcome speech was delivered by the Chair of the ICM 2018 Organizing Committee, Professor Marcelo Viana on the 1st of August. The conference was very well attended with over 5000 registrants from Pacific, India, Brazil, Argentina, Indonesia, Japan, France, Bangladesh to name a few.

The program featured 14 invited lectures, 21 plenary lectures, short communications and poster presentations from mathematicians, engineers and researchers from various areas. I attended some very interesting and beneficial sessions. In particular, I found the sessions concerning Lyapunov's theory and stability of nonlinear dynamical systems to be of special benefit to me as this area is directly related to my research.

My short communication session was on Saturday, 4th August at 3:00pm. The seminar was well attended and there was a fair amount of discussions after the talk. The abstract of the paper on which my talk was based is:

In this paper, we propose a suitable solution for parking and obstacle avoidance of a car-like mobile robot. Our new method is based on strategically fixing landmarks in a bounded workspace that will aid the robot to safely navigate from an initial position to a goal position and finally park correctly inside the designated parking bay. By autonomously controlling the translational velocity and the steering angle, the car-like robot is able to navigate from one landmark to another and finally converge to a target with a pre-defined posture. Computer simulations are used to verify the effectiveness of the proposed method.

#### **4. Conclusion**

The ICM2018 was very well organized and was attended by researchers from all over the world to contribute during this auspicious occasion. I found this conference a valuable one.

#### **5. Acknowledgement**

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