#### EVENT REPORT

# "Celebrating Women in Mathematics"

- a May 12 initiative event at IISER Tirupati

### **EVENT OVERVIEW:**

The online event organized by the Math Club of IISER Tirupati on May 12, 2024 was a part of the 6<sup>th</sup> edition of the May 12 initiative – a day where the mathematics community across the world commemorates the work of remarkable mathematician, late Professor Maryam Mirzhakhani. The first female awardee of the prestigious Fields medal at 2014, Prof Maryam's untimely death at 2017 motivated the establishment of the May 12 initiative – observed on the day of her birth.

#### **EVENT SUMMARY:**

The event comprised of three components – which began with MOVIE STREAMING from 11:30 am to 12:30 pm which saw the screening of the latest entries from the 'Journeys in the Land of Math – Animated mini-series': namely "Alicia Boole in the Land of Polytopes", and "Kovalevskaya's spinning top". After the end of each movie, an interaction session for about 10 mins was held during which Zoom<sup>™</sup> polls were launched to hear the participants' response about the particular movie. Live-interactions were initiated about the ideas presented in the movies.

The second part of the event, the 'MATHEMATICAL FAIR' from 2:00 pm to 3:30 pm comprised of short 15-minute talks from about 5 speakers on various topics. Starting with Mr. Saivenkat from IISER Tirupati who gave a simple introduction to 'Hopf Algebras', followed by an exposition on 'Collatz Conjecture' by Mr. Madhusudhan Deval from BHU. Then, Ms. Yajushi Srivastava gave a talk about the journey late Professor Jim Simons - a mathematician who cracked the world of finance and created a blue-print for other mathematicians who wanted to be successful in the industry. This was followed by Professor Sanjay Mishra from Amity School of Applied Sciences, UP, who gave a short talk on the "Topological classification of objects". Finally, Dr. Ayush Jaiswal from IISER Tirupati gave a talk on the works of Professor Karen Keskulla Uhlenbeck – the first female awardee of the Abel Prize. In between each talk, a live-interaction Q&A session was held and a lot of participants interacted positively.

The final part of the event, the PANEL DISCUSSION titled "Math for all: Bridging gaps between abstract theory and undergraduate curiosity" was held from 4:00 pm till 6:00 pm. The panelists – Dr. Tulsi Srinivasan and Dr. Shantha Bhushan from Azim Premji University were joined by Ms. Thamarai Valli and Ms. Akshara Vincent – two alumni of IISER Tirupati who are currently in the 3<sup>rd</sup> year of their PhD programs at Imperial College London and University of Pittsburgh respectively. The session was mediated by one of the organisers, Ms. Parinitha from BSMS 2021 at IISER Tirupati. Questions were collected from the audience prior to the event and were pitched to the panellists shortly after an introduction and opening remarks from each of them. Some of these questions were - 'Strategies to make Abstract theory palatable to beginners', 'Importance of networking', 'Various general and specific problems faced by Women in math and possible solutions and coping strategies', and 'Role of mentors in their journey'. The discussion also extended into the 'Management of personal and professional lives', 'Pressure of employment', 'The structure of graduate research programs and an investigation on any possible differential experience for men and women' amongst other connecting discussions. The event was attended by faculties from IISER Tirupati – particularly by Professor Nagaraj D S who stayed through the entire event, and Dr. Shalini Bhattacharya both of whom had shared positive feedback on the event.

#### **EVENT FEEDBACK:**

The event was received well by the participants and the panellists. The feedback collected have been compiled and are available in the file given below. The google drive link for the recordings of the event are given below, along with a few pictures of the event.

https://drive.google.com/drive/folders/1jcRq7m5r5qPCsHw1VgEEILe7YLadkld?usp=sharing

#### **ORGANISER FEEDBACK:**

The event was organised by the coordinators of the Math Club – Parinitha M (BSMS 2021) and Mukesh Kumar K B (BSMS 2020), with support from Sasi Mitra (BSMS 2021) and Karthika Bharathi (BSMS 2023). We believe that consecutive instalments of this event can be held offline where panellists and willing participants can be invited for the event.

#### **EVENT LOGISTICS:**

We thank COSA and the Cultural Secretary, Mr. Mukesh Kumar for providing us with Zoom Pro and Canva Pro access that helped facilitate the event.

## **CLOSING REMARKS:**

On behalf of the organisers and everyone involved, we would like to thank the organisers of the May 12 initiative for providing an opportunity to have an open discussion about topics that need to addressed. Moreover, we would like to note that this tradition will be continued here at IISER Tirupati for we believe that this forum will help promote math and theoretical research in general at national research institutions.

