



**The 28<sup>th</sup> International Conference of the Forum For Interdisciplinary Mathematics**  
**SYNERGIES IN COMPUTATIONAL, MATHEMATICAL, STATISTICAL AND PHYSICAL SCIENCES**  
**(FIM 28: SCMSPS 2020 - VIRTUAL - November 23 - 27, 2020)**

**A Re-Cap 27.11.2020**

A very Good Afternoon to all online for the Valedictory function of the 28<sup>th</sup>, 5-day International Conference of the Forum for Interdisciplinary Mathematics (FIM), SYNERGIES IN COMPUTATIONAL, MATHEMATICAL, STATISTICAL AND PHYSICAL SCIENCES (**FIM28SCMSPS2020**), organized virtually by Stella Maris College, Sri Siva Subramanya Nadar College of Engineering and FIM from 23 – 27, November 2020 that has come to the concluding session today, the 27.11.2020. With a word of thanks for the great response, a very warm welcome all the Professors, faculty across disciplines, delegates from the Industry, and Scholar participants. Your presence and participation in the conference has made the conference successful.

We have come to the end of the 5-day International conference FIM28SCMSPS2020 which had closely packed knowledge filled resources and paper presentations. The registered participants are academicians who are Professors, teachers, researchers from industry, research scholars who are either involved in hardcore research of international standard and enthusiastic students at the graduating level and M. Phil. Level who are aspiring to do higher education from different disciplines. This conference has space for all the participants and the resource materials are of the international standard which gave an insight into various branches of Mathematics, Physics, Computer Science, several branches of Engineering.

Despite the unprecedented global disruption caused by the Covid 19 pandemic across the world, the quest for contemporary relevance of the recent formulations and intersections in scientific knowledge remains the same. It is in this spirit of ceaseless enquiry that we had embarked on a virtual journey of intellectual exploration. And there was also one more major challenge of the NIVAR cyclone that devastated normalcy in Chennai, the hub of the conference. We immediately jumped into alternate arrangements of trying to host the conference with the help of friends from outside Chennai. As the power supply on campus was uninterrupted with the help of generators and the fiber net connection being safe and not affected by NIVAR, we have successfully come thus far. Thanks to the Principal and management of Stella Maris College for all the facilities provided including the stay on campus during the conference.

The long preparation started bearing fruit as we began the conference with the Inauguration Session. The Session began with an invocation Tamil Thai Vazalthu followed by prayer offered by Sr. Susan Matheikal fmm, Secretary of the college. The conference was officially inaugurated by lighting of the lamp virtually by the chief guest Selvi. Apoorva, IAS, Principal Secretary to Government, Higher Education Department, Government of Tamil Nadu, Tamil Nadu, India and the Two principals Dr. Sr. Rosy Joseph fmm and Prof. V.E. Annamalai who were conference chairs, Prof. Junzo Watada, President FIM & Prof. Bhu Dev Sharma, Chairman , Board of Directors, FIM and Prof. S. C. Malik, Chairman, Conference Organizing committee. Welcome address was delivered by Dr. Belina Xavier, convener, FIM28SCMSPS2020 & Head, Department of Physics. Stella Maris College. Dr. Felbin C. Kennedy, Organizing Secretary, FIM28SCMSPS2020 and Vice Principal, Stella Maris College, spoke about the process and germane by which the conference began to the shape that it had taken today. Following this we had both the Chairs addressing the gathering. Selvi. Apoorva, IAS, Principal Secretary to Government, Higher Education Department, Government of Tamil Nadu delivered her

Inaugural Address highlighting the relevance of the conference in the higher education scenario. Prof. Bhu Dev Sharma, former Professor of Mathematics, Clark Atlanta University, Atlanta, USA & JIIT (Deemed Univ.), Noida, India, Founder Member FIM and Chairman, Board of Directors, FIM spoke about the Forum for Interdisciplinary Mathematics.

We then had the first Keynote speaker for the session speaking to us live from USA during his late-night hours, Prof. Puru Jena, Distinguished Professor, Department of Physics, Virginia Commonwealth University Richmond, VA, USA on the topic, “In Search of Metastable Forms of Matter - Discovery of U-Carbon”.

Following the first Keynote Address, Lifetime achievement awards were conferred on two great academicians, **Prof. Bal Kishan Dass**, Professor Emeritus, Department of Mathematics, Delhi University, India and **Prof. T. Parthasarathy**, Professor Emeritus, Indian Statistical Institute, India for their outstanding contributions in teaching, research and professional activities in their areas of expertise.

We then had some remarks on the conference by Prof. P.V.Subrahmanyam, Former President FIM & Former Head, Department of Mathematics, IITM, Chennai, Tamil Nadu, India. We then had the release of the Book of Abstracts.

Prof. Junzo Watada, President FIM & Professor Emeritus, Waseda University, Japan & Research Professor, Research Institute of Quantitative Economics, Zhejiang Gongshang University, China gave the President’s address and went onto delivering his inspiring 2<sup>nd</sup> the Keynote address on the topic, “ Kenneth Arrow’s Social Choice and Building Fuzzy Transitivity Relation”. Following this, the 3<sup>rd</sup> very interesting keynote address dealing with an open problem for more than 200 years, was delivered by Prof. Venkat Venkatasubramanian, Samuel Ruben-Peter G. Viele Professor of Engineering, Department of Chemical Engineering, Columbia University, NY, USA on the topic, “How much income inequality is fair? “.

Cultural programme by the students of Stella Maris both live and recorded portraying the culture of South India was displayed.

The Inaugural Session came to an end with the Vote of thanks rendered by Dr.P.Venugopal, Convenor FIM28SCMSPS2020 & Head, Department of Mathematics, SSN College of Engineering, Tamil Nadu, India. The entire programme was hosted by Dr. V.Jude Annie Cynthia, Convenor FIM28SCMSPS2020 & Head, Department of Mathematics, Stella Maris College.

On the outset, every day the conference has two sessions proposed and between the two sessions with a gap of around 2&1/2 to 3 hours was set to enable participants to charge their gadgets and self to stay connected for another 4 to 5 hours. There are 6 keynote addresses, 3 at the Inaugural function and 3 in Valedictory function covering the themes of the conference. There are Sessions running from A – Z and further AA – QQ. Several sessions were parallel sessions, and some sessions have sub-sessions too. In all we were through 55 sessions running over all the five days and all the sessions were carefully tailored to suit the themes and their continuity and was applauded by the participants. There was the Prestigious Prof. R. S. Varma best paper award competition that was held on 23.11.2020 by a panel of Jury headed by Prof. Deepa Sinha, Head, Department of Mathematics, South Asian University, New Delhi the awardee/ awardees will be declared today. There is prize money with the award apart from a certificate.

We had speakers and presenters were from across the globe, Australia, Brazil, Chile, China, France, Germany, Israel, Japan, New Zealand, Portugal, Sultanate of Omen, Slovakia, Taiwan, Thailand Turkey, UK, USA and India in all from 18 countries. In India almost all the advanced research centres are represented. Thanks to the IIT-M, IMSc, CMI, ISI-Chennai, RIASM, IIT-I, IIT-H, South Asian University, Delhi, HP University, Shimla, IISc-Bangalore, TIFR-Bangalore centre, Indian Institute of Space Science and Technology, Kerala and the list continues. A number of FIM members from countries other than India are enthusiastically participating. Some of the collaborators with Stella Maris College participating are, GITAA, an IIT Incubated research centre, Liverpool Hope University, UK, Swinburne University of Technology, Australia and LeTourneau University, USA.

14 out of 15 Plenary sessions happened. And 13 invited Special sessions, 20 Symposia, and 5 paper presentation sessions with 2 exclusively for Statistics and 2 general paper reading sessions did happen with very few not being able to participate. In some of the sessions we did have problem in participants not being able to join. We did organize alternate sessions for them. The invited speakers of all the special session and Symposia sessions delivered their talks in a scholarly and professional way. I am projecting the entire list of invited speakers in the Plenary, Special sessions and symposia sessions with their topics. We had 97 invited speakers, 36 special sessions and symposia coordinators who were also involved in the talks and 72 chairpersons. We did have some of the coordinators and chairpersons involved in more than one session.

50 supportive technical coordinators operated as hosts and co-hosts managing the entire conference. There were 111 paper presentations including RSV best paper award competition presentations. Apart from the organization, contribution from Stella Maris College and SSN College of engineering, in way of talks and paper presentations, there were 20 from Stella Maris and 24 from SSN.

We are now here at the final session, Valedictory Programme to conclude the conference Proceedings. Hope you enjoyed the knowledge feast as much as we, the organizers did.

We have Prof. Gerald Pillay, Vice Chancellor and Rector, Liverpool Hope University, Liverpool, UK whom in spite of his busy schedule and late evening hours, has agreed to deliver the Valedictory address titled,

**” Working together for the Common Good: New Challenges for the Academy”.**

We also have 3 Keynote addresses today. They are by **Prof. S. Sundar**, Head, Department of Mathematics, IITM, Chennai, on “Particles in Fluid - Modeling and Methods”; **Prof. Krishnasamy T Arasu**, Trusted & Resilient Systems, Riverside Research, Beavercreek, Ohio, USA, on “Algebraic Manipulation Detection Codes” and **Prof. Masahiro Inuiguchi**, Department of Systems Innovation, Osaka University, Japan on “Interval Probability Model and Its Relation to Evidence Theory”.

Though this event is taking place within the virtual framework of a new undertaking amidst challenges, we are thankful for your continued support and participation to keep the dialogues alive - speculative, hopeful, and fruitful, once in a lifetime experience to cherish.

Please fill the Google form that will be mailed to you, to help us prepare your certificate and receipt for registration. Hard copy of the certificates will be sent later.

Now I would like to bring to your notice the procedures regarding Publication of papers presented in the conference:

Please Check the website for details of journals and Proceedings of the conference and their formats:

Please incorporate carefully the suggestions and corrections told and answer quarries raised during your presentations.

- Last Date for Submission of Final Version of Paper – 28<sup>th</sup> December 2020 through the FIM's official Mail.
- For each paper, the authors are expected to suggest 3 reviewers for the peer review process
- AMS Classification and Keywords (approx. 5) should be provided
- The Abstract should contain a maximum of 300 words only
- Total No. of pages – 10 to 12
- Scope of the Journal IJSRE International Journal of Statistics and Reliability Engineering – Statistics, Information Theory, Reliability Engineering, Computational Fuzzy Mathematics
- Scope of Journal: Journal of Algebraic Combinatorics: papers related to Algebra
- Scope of Springer Proceedings: Mathematics and Computer Science related papers only
- The selected peer-reviewed papers are to be published in a Special Volume of Journal of Combinatorics, Information & System Sciences JCISS

Last but not the least, I thank Lord almighty who blessed us to make the conference possible beyond all odds.

Thank you.