

IAVM

Report – 3rd online Vedic Mathematics conference - 2017

The third online conference was held during the weekend of 18th – 19th March 2017 and organised by the Institute for the Advancement of Vedic Mathematics (IAVM) in association with the Vedic Maths Academy (VMA). The conference consisted of research papers, workshops, discussions and reports from different parts of the world about activities connected with Vedic Mathematics.

All the participants were enthused by the interesting presentations and workshops.

Day 1

The proceedings opened with a welcome from Swati Dave followed by a brief report by James Glover on the recent 1st International Vedic Mathematics Conference in Kolkata. The proceedings from that event will be available within two months from now.

Anna Foglino, from Italy, presented a research paper on how the sutras apply to the calculation of Permutations, Combinations and Dispositions. This largely employs the Ekadhikena sutra, By one more than the one before.

We then heard from Shruti Tulsian in Luxembourg who has recently started running courses on VM for children. She has made information about these courses available on her website at vedicmathslux.org. Her aim is simple – to make students love maths and to prevent maths phobia. Shruti also aims to get the school teachers interested in the methods. She has conducted several workshops at high-footfall events such as an education fair.

Nivedna Sirkissoon also described a recent start-up in Johannesburg, South Africa. She has initiated two organisations, Vedic Maths Org South Africa and MagicalMaths. The first of these has been founded in order to assist underprivileged children with their maths skills and is based on donation and sponsorship.

In Israel Raymond Austin has been studying VM and is now delivering lessons to a few children. He has approached the Indian embassy in Tel Aviv to help promote VM in Israel. Raymond is currently working on translating Vedic Maths into Hebrew.

Kenneth Williams gave an inspiring workshop on how each of the sixteen sutras of Vedic mathematics can be used for division. This really opens up the possibility for new areas of research because each of the sutras has manifold applications. Ken invited us to the challenge of taking some other areas, such as multiplication, and also finding out how each of the sutras apply. The gauntlet has been thrown down!

Vinay Nair gave a very interesting and thought-provoking workshop dealing with puzzles and proofs. The puzzles started with reverse multiplications, in other words, given a product, find the two factors. He led on to look at puzzles involving combinatorics, palindromes and Nikhilam multiplication. Vinay then showed how proofs of the Vedic methods can be seen through algebra. He concluded that puzzles and proofs can help develop creative thinking within students.

Day 2

The second day of the conference opened with Swati giving an overview of the IAVM, it's activities over the past year and the future roadmap. In 2016 the institute successfully became a UK registered charity and launched its website. In addition to assisting the VMA with the last online conference, the IAVM organised and ran the 1st International VM Conference and launched its ongoing series of free webinars. Swati then outlined plans for 2017 which include setting up an online platform, assessment and certification at three levels, packs of practice worksheets and organising and running the 2nd International conference.

Guru and Anu, who live in Sydney then presented a new complete digital initiative for the IAVM. Their plans are to provide online practice and assessments for the certification, VM mobile apps and an e-learning programme. The first stages of this large project will be piloted during this year.

Nacho Ruiz lives in Spain and gave a report on his work there. His vision is to write Vedic maths material in Spanish. He has written a free ebook called *Multiplica Como Nadie* (Multiplies Like Nobody) and is writing another on Division. He is also engaged in translating Ken Williams Teacher Training Course into Spanish. Nacho has produced a website and blog which can be found at matematicasvedicas.org.

Krishna Kirtan explained about the progress of his Sunday school programme in which he has 8 groups for 1 - 2 hours for 36 Sundays in a year. He has a carefully structured course at Elementary for grades 3 - 7, Intermediate for grades 5 - 10 and Advanced for grade 12. Each course is further divided into three levels and each level divided into 4 Blocks of particular topics. Krishna also reported on the successes and challenges he has met.

A video slide report from Veronica Prudente revealed some of the amazing work going on in several parts of the Philippines. Each year Veronica and Virgilio run Math-Inic Maths Challenges involving thousands of children. Virgilio has written two books, 25 Maths Short Cuts (6000 copies sold in two years) and, more recently, Algebra Made Easy As Arithmetic. Both of these are based on the Vedic Maths methods.

We received a slide presentation from Sivaram Pusapati in Japan. He described how he has run two elementary and two intermediate courses there. He has also written a Homework Book for practice (available online for free) and translated the Elementary Level Manual into Japanese. Sivaram is helping promote VM in Japan through television shows and the Tokyo Maths Club. He has an associate teacher reaching out to Japanese in Yokohama.

In New Jersey, Chandrasekheran Rama holds regular classes in VM for children once a week at multiple centres. He runs four parallel classes involving 50 - 60 students. He is currently looking for more teachers to teach the material.

Raymond Austin, who lives in Israel presented his research paper, Application of Vedic Mathematics in High Speed Systems – Complete Survey. This paper describes how the VM methods used in binary calculations speed up processes used in computing. It provides a very thorough description of the structure of technology processes and objectively surveys the current designs.

I gave a workshop on how the VM method for algebraic division using the Paravartya sutra can be used to provide very easy and quick solutions for some problems involving binomial expansions when a power series expansion is required. The method was also employed as part of the proof of Ramanujan's intriguing discovery that the infinite sum of all positive integers comes to minus one-twelfth!

For the final workshop on day 2 Naveen Bhargava showed us some wonderfully speedy methods for squaring various numbers. This was a glimpse of some of the developments he has made by recognising patterns in numbers. Navreen will be giving a workshop at our next webinar on 23rd April. Please join us for that.

In conclusion, the conference revealed a widespread interest not only in the different areas of mathematics relevant to the Vedic methods but also the rich variety of projects and courses available in different parts of the world. There were reports from Australia, Philippines, Ghana, India, United Kingdom, USA, Luxemburg, Spain, Japan, Israel, South Africa and Italy. A wonderful portrayal of expanding interest and development! Participants were greatly encouraged and enthused and the organisers would like to thank all who took part.

Papers and video workshops will soon be available on the IAVM website at instavm.org.

-Report compiled by Marianne Fletcher, Trustee, IAVM.