# IAVM

# **Report - 4th online Vedic Mathematics conference - 2018**

The 4th Online Conference was held on the weekend of March 17th - 18th 2018 and organized jointly with the Vedic Maths Academy. There was a great enthusiasm amongst all who attended, and the presentations were informative and inspiring. As well as news of the forthcoming live conference in Bangalore in August and a brief report of the conference in Delhi last December, the online meeting concentrated on new research in Vedic Mathematics and reports on events and developments from different countries.

#### **PRESENTATIONS AND PAPERS**

Following interesting papers were presented at the conference.

#### 1. Number Patterns - Ken Williams

This shows how various patterns in number can be used to achieve intricate and sophisticated calculations in arithmetic.

#### 2. Vedic Maths Methods for the Problem of Least Squares - Anna Foglino

Anna demonstrates how VM techniques can help calculate linear regression, the equation for the line of best fit, in Statistics.

## **3.** Comparative Study of Adders used in Designing High-Speed Vedic Multipliers for VSLI Applications - Raghavendra Prasad

This paper shows how simple VM techniques can be used to speed up computer processing. Raghavendra is engaged in up-to-date research on this at the RV College of Engineering, Bangalore.

#### 4. Statistics and Vedic Mathematics - Ken Williams

In this presentation, Ken gives an overview of how the VM sutras universally apply to the whole subject of Statistics.

### 5. Calculating Compound Interest Mentally - Kuldeep Singh

Can this be done? Yes! Kuldeep explains how by using VM techniques in combination with binomial coefficients.

#### 6. Cumulative Binomial Probabilities - Ken Williams

This paper shows how Vedic Maths, together with the binomial coefficients can be used to calculate cumulative binomial probabilities.

### 7. Bypassing Compound Angle Formulae using Triples - Nathan Annenberg

Using Pythagorean triples Nathan show how to eliminate the need for learning sum and difference formulae for trigonometric functions.

#### 8. How the Unit Circle Variables can Facilitate Proving Trig Identities - Nathan Annenberg

This is another powerful application of using triples.

#### 9. Cumulative Binomial Probabilities - Ken Williams

This paper shows how Vedic Maths, together with the binomial coefficients can be used to calculate cumulative binomial probabilities.

# **10.** Vedic Maths - A Merit in the Management of Competitive Examinations - Vasanth Shastri

Vasanth demonstrates how VM techniques can be used to solve some tricky-looking problems found in competitive examinations in India.

#### 11. Vedic Mathematics and Binary Strings - Marianne Fletcher

Marianne has discovered how the VM technique of calculating decimal strings in a computer algorithm is considerably speeded up when working in binary.

#### **PROJECTS FROM AROUND THE GLOBE**

Geeta Ghormade in Nagpur described the courses that she and Dr Anant Vywahare, together with a team of expert enthusiasts, run at the Kavikulaguru Kalidas Sanskrit University. At present, the two courses are Certificate in Vedic Mathematics and Diploma in Vedic Mathematics. They are open to students with a minimum of grade X12 Maths.

Nacho Ruiz from Spain gave a presentation on the work he's been doing in getting VM known about amongst Spanish speakers. He's been building an excellent website that can be found at <u>matimaticasvedicas.org</u> containing video tutorials on VM calculations. Nacho is also engaged in translating Ken William's books into Spanish and hopes to open the subject up to people in South America.

In Pune, Nitika Gupta explained the work she's doing with youngsters using Pebble Maths. This is a kinaesthetic approach used to establish basic number concepts invented by Vera Stephens in Australia. This approach leads into VM.

From the Philippines, Nica Prudente gave a presentation on all the amazing events and competitions that her and her father, Ike, have been up to in various regions. One of their themes uses the VM techniques in arithmetic to make algebra very accessible.

In Kerala, Devaraj showed slides of events he's been running with children and students. He entitles his projects as Cosmic Maths.

We also heard from Narayana Reddy who lives in Telangana. He has been running VM courses for children and now has a self-published book entitled 'Learn Vedic Mathematics in 10 Days'.