

# Editorial

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*B V Rajarama Bhat, Editor*

India is celebrating the 125th birth anniversary of Srinivasa Ramanujan as the National Mathematical Year. In this context, *Resonance* is bringing out this special issue on Indian Mathematics.

Counting India's contribution to mathematics begins with zero. Then we have the decimal system and there were several other remarkable contributions to geometry, number theory and other areas in ancient India. We have covered ancient Indian mathematics earlier in *Resonance*. For instance, in the March issue of the current year you find S G Dani's article 'Ancient Indian Mathematics – A Conceptus'. There he discusses the famous Bakhshāli manuscript and refers to an approximation formula appearing in it for computing square roots of natural numbers. This formula is elaborated further using modern mathematics by S Shirali in the current issue.

This issue has an article by S G Dani presenting the Indian mathematics scene of early 20th century. A culture of modern mathematics was being developed in India by several brilliant Indian mathematicians. S Ramanujan was the brightest star, but there were others too. Sarvadaman Chowla and S S Pillai were two such and B Sury and R Thangadurai tell their story.

In 1959 R C Bose, Parker and Shrikhande startled the mathematical world by settling a centuries-old conjecture of Euler on Latin squares in the negative. You may find a very readable account of this in the article of B Bagchi. Then we also have a short article by C S Yogananda on a remarkable identity of S Ramanujan.

Finally, we have an interview with S R S Varadhan, one of the most accomplished Indian mathematicians with us today. He is the only Indian who has won the Abel Prize. The interviewer is



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R Sujatha, one of the well-known female mathematicians from India.

To be honest, the current status of mathematics in India is nothing to boast about. We have a long way to go to reach top levels. Research in science in general and mathematics in particular, is essential for India's progress. Fortunately, the Indian Government has realized it and is promoting science education and research in a big way. Several new institutes have been set up in recent years with this goal. We provide an account of opportunities available to youngsters who are interested in pursuing mathematics. Most of these institutes provide scholarships, hostel accommodation and excellent academic atmosphere to students even at the undergraduate level. It is just that we need to persuade bright minds to consider science as a career as it can give immense intellectual satisfaction to them and is good for the country.

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This is the Graeco–Latin square based on which the front cover has been designed. For more details on this, please see the article on p.895.

