Editorial

N Mukunda, Chief Editor

With this issue we complete the first year and volume of *Resonance*. At the same time the present editorial team prepares to hand over to a new one which will take charge from the New Year. For all of us it has been a rich and educative experience. Many letters have come to us, some appreciative and others critical. The former are pleasant to read, but in some ways the latter are more important. One thing we have learnt – the gift of writing expository articles on science and mathematics, accessible to a wide audience, is quite rare and also difficult to cultivate. For many reasons, this seems to be particularly so in our country. But we have also been encouraged to see some really talented writers as well. As editors we have had to judge material in our hands, even when solicited by us, as objectively as possible; though the final decisions, reflecting our own backgrounds and judgements, may sometimes be viewed as subjective! We hope the new editorial team will build upon this year's efforts and, given the unavoidable constraints, continually improve the quality and appeal of *Resonance* .

The twentysecond of December is the date of birth of Srinivasa Ramanujan Iyengar. In 1987 his birth centenary was celebrated the world over, and Robert Kanigel's marvellous biography "The man who knew infinity" appeared just around then. We feature Ramanujan in several ways in this issue: the familiar haunting passport photo on the back cover; an account by Shailesh Shirali of a problem on continued fractions to which Ramanujan had contributed an answer ; a review of Kanigel's book by Rajat Tandon; another by Vittal Rao of G H Hardy's "A Mathematician's Apology"; and finally the text of an extempore lecture to a

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general audience given by Atle Selberg at the Tata Institute of Fundamental Research, Mumbai, on the occasion of the centenary celebrations in 1987.

As Tandon remarks, only the universality of mathematics can explain how the Englishman Hardy and the South Indian Ramanujan could communicate so freely in technical matters, even while being unable to cross cultural barriers. And in the same vein we may say that is also how Ramanujan could end up deeply influencing Selberg in "remote Norway". Fortunately both Kanigel's book and Hardy's "Apology" are available at reasonable prices; and the latter has an introduction by C P Snow dealing largely with the Ramanujan-Hardy story. There are attempts now and again to trace the roots of Ramanujan's genius, his methods of working and presentation of results, to earlier existing traditions in Indian mathematics. In this context, Selberg's remark about Evariste Galois in France and Niels Henrik Abel in Norway (who both died very young) - "although they had their difficulties, come from a somewhat more fortunate environment" - is very significant. To my mind, the answer to the question in what sense Ramanujan was a child and product of India, goes beyond mathematics and covers all forms of such genius; and is perhaps most poetically captured by Kahlil Gibran's lines in "The Prophet":

Your children are not your children.
They are the sons and daughters of life's longing for itself.
They come through you but not from you,
And though they are with you yet they belong not to you.
You may give them your love but not your thoughts,
For they have their own thoughts.
You may house their bodies but not their souls,
For their souls dwell in the house of tomorrow,
which you cannot visit, not even in your dreams.