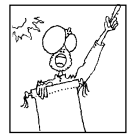
Information and Announcements



1997 Nobel Prizes

Physics

The 1997 Nobel prize in Physics has been awarded jointly to *Steven Chu* of Stanford University, USA, *Claude Cohen-Tannoudji* of College de France and Ecole Normale Superieure, France and *William D Phillips* of the National Institute of Standards and Technology, Maryland, USA for development of methods to cool and trap atoms with laser light.

Chemistry

The 1997 Nobel prize in Chemistry has been awarded with one half to

> *Paul D Boyer*, University of California, Los Angeles, USA and *John E Walker*, Medical Research Council Laboratory of Molecular Biology, Cambridge, UK, for their elucidation of the enzymatic mechanism underlying the synthesis of *adenosine triphosphate* (ATP)

and with one half to

> *Jens C Skou*, Aarhus University, Denmark for the discovery of an ion-transporting enzyme, Na+, K+ – ATPase

Physiology or Medicine

The 1997 Nobel prize in Physiology or Medicine has been awarded to *Stanley B Prusiner* of the School of Medicine, University of California, San Francisco, USA for his discovery of *Prions* – a new biological principle of infection.

Addendum to 'Nīlakaṇṭha, Euler and π'

(*Resonance*, May 1997)

A letter has been received from M D Srinivas of the Centre for Policy Studies, Chennai. He points out that it is incorrect to attribute the result that $\pi/4 = 1 - 1/3 + 1/5 - 1/7 + \cdots$ to Nīlakaṇṭha Somayāji as was done in the article, and that it would be more appropriate to call it the *Mādhava-Gregory series*. He writes: "... [proofs] are to be found in the commentaries on the Tantrasangraha and Līlāvatī by Saṅkara Variyar (1500–1560), a student of Nīlakaṇṭha, ... Saṅkara clearly attributes these series to Mādhava (1350–1410) and the proofs are presumably due to him. In any case there is no mention of Nīlakaṇṭha as having been the first to have proved them... Some scholars (notably R C Gupta and G C Joseph) have preferred to call it the Mādhava-Gregory series ...". He adds that Nīlakaṇṭha's works display the in-depth knowledge that he had of the work of Mādhava (for instance, he cites the result of Mādhava giving the value of π correct to 11 decimal places, and also explains that π cannot be exactly expressed as a ratio of two integers) and that his more important contributions lie in the field of astronomy rather than in mathematical analysis. Srinivas writes: "Nīlakaṇṭha's main contribution is that he carried out a major revision of the traditional Indian planetary model, which he presented first in his Tantrasangraha (written in 1500 AD)". Readers who are interested in learning more about this are referred to the article in CURRENT SCIENCE, Volume 66, page 784 (1994), by K Ramasubramanian, M D Srinivas and M S Sriram. They could also write directly to M D Srinivas (Centre for Policy Studies, 27 Rajasekaran Street, Mylapore, Chennai 600 004).

Shailesh A Shirali

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