The entire edifice of trigonometry can be built using $C(t)$, $S(t)$ and well-known principles of Real Analysis. We have been able to find our way around without any help from the extraterrestrial $\sqrt{-1}$.

Strictly speaking, if we wish to prove the formula $C' = 2\pi r$ using calculus, then this is the way we must proceed. The path generally followed in calculus textbooks is not a proof at all; it does not satisfy the requirements of logic.

**Information and Announcements**

**Summer Programme for Students & Teachers - 2004**

Physical Research Laboratory, Navrangpura, Ahmedabad 380 009

The purpose of the Summer Programme is to expose the students/teaching community to frontiers of research in the various fields being pursued at the Laboratory. The selected participants will work on specific projects in association with scientists of the Laboratory. The Teacher participants will have an opportunity to work in advanced laboratories and to evolve a research programme that they can continue after returning to their University/College. A limited number of students in III-year BSc will also be considered for Summer Programme for Students. The details of the programme are as under:

**Students (May 11 – July 10, 2004) and Teachers (May 18 – July 17, 2004)**

Students currently studying in M.Sc. first year in Physics / Geophysics or B.Sc. Physics (III-year), B.Tech. (Engineering Physics). Teachers involved in teaching Physics at post-graduate (M.Sc.) level.

**Stipend & Facilities:** Students – Rs. 3800/- pm, return II-class train fare by the shortest route and hostel accommodation on a nominal charge. Teachers – Rs. 6000/- pm, return II-AC train fare by the shortest route and guest house/hostel accommodation on a nominal charge.

**Essential Qualifications:** Students – I-class in BSc (for students studying in I-year MSc) or average I-class in all the previous semesters for BTech./MSc integrated course in Physics. Teachers – M.Phil. / Ph.D. in Physics, with 2-3 years’ of teaching experience. A strong interest in research as evidenced by participation in research projects/published work is desirable. Persons with Ph.D. degree and below 45 years of age will be preferred.

Applications containing CV of the candidate including: name, date of birth, a passport size photograph, address of the College/University as well as permanent address/address for correspondence, telephone no., email-id. % marks obtained in the various examinations and research interest, duly forwarded by the Head of the Department, should be sent to Dr. P Sharma, Head, Academic Services, at the address mentioned above. For Teacher participants, details of research work being carried out and courses being taught by them along with a list of publications should also be enclosed. Applications sent by candidates directly without being forwarded by the Head of the Department will not be considered.

**The last date for receiving application is March 16, 2004.** Email: psharma@prl.res.in. Fax: 079-630 1502.