



**Department of Mathematics  
Bharathidasan University  
Tiruchirappalli – 620 024  
Tamil Nadu**

**Advanced Training Programme in Mathematical Analysis  
August 05 – 09, 2015  
Consolidated Report**

The 5-day Advanced Training Programme in Mathematical Analysis was organized by the Department of Mathematics, Bharathidasan University, Tiruchirappalli, Tamil Nadu with the support of NBHM and ISI Chennai Centre, Chennai started on 5<sup>th</sup> August 2015. The following persons organized the programme.

1. Prof. S. Ponnusamy( Chairman )  
Head, ISI Chennai Centre  
Chennai
2. Dr. C. Durairajan( Organizing Secretary )  
Department of Mathematics  
Bharathidasan University, Tiruchirappalli - 620 024
3. Prof. M. Marudai( Convenor )  
Department of Mathematics  
Bharathidasan University, Tiruchirappalli - 620 024

The committee members are Dr. A. Tamilselvan, Dr. P. S. Srinivasan and Dr. V. Piramanathan from the Department of Mathematics, Bharathidasan University, Tiruchirappalli, Tamil Nadu.

The programme was inaugurated by Prof. R. Balakrishnan, Adjuncted Professor, Department of Mathematics, Bharathidasan University, Tiruchirappalli on 5<sup>th</sup> August 2015 at 9.00AM. The classes were started at 9.30AM on 5<sup>th</sup> August 2015. Every day we had four sessions( the duration of each session is one and half hours) and two speakers. Every day the morning session started at 9.30AM and the last session ended at 5.30PM. There were 71 participants which include, 37 M. Sc. Students, 1 M. Phil. Student, 23 Research scholars and 10 Teachers.

The speakers are

1. Prof. S. Ponnusamy  
ISI Chennai Centre, Chennai
2. Prof. S. Kesavan  
IMSc, Chennai

3. Prof. S. Somasundaram  
Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu
4. Prof. G. P. Youvaraj  
Ramanujan Institute for Advanced Study in Mathematics  
University of Madras, Chennai
5. Prof. T. Parthasarathy  
Adjunct Professor  
CMI, Chennai
6. Dr. A. Sai Ram Kaliraj  
Post Doctoral Fellow  
ISI Chennai Centre, Chennai

**Topics covered:**

- Prof. S. Somasundaram – Continuity, Differentiability, Applications(both in single and higher dimensions) and problems related to the Inverse and Implicit function theorems.
- Prof. G. P. Youvaraj – Sequence and Series of functions and discussed its related problems.
- Prof. S. Ponnusamy – Problems related to conformal mapping, complex power series and Singularities.
- Prof. S. Kesavan – Riemann Integration and its related problems.
- Prof. T. Parthasarathy – Uniform continuity and problems( conditions under which a sequence of continuous functions converges to a continuous function; show a set of continuous functions defined over the closed and bounded intervals complete; examples to illustrate the sharpness of these results).
- Dr. A. Sai Ram Kaliraj – Tutorial on Complex Analysis.

The classes ended at 4.30 PM on 9<sup>th</sup> August 2015. There were no formal valediction. The certificate for the participants were distributed by the resource persons Prof. S. Kesavan and Prof. S. Ponnusamy.