IIT Palakkad is organizing a one day workshop for high school mathematics teachers from Palakkad. This workshop will provide an opportunity to interact with prominent educators with diverse experiences in **mathematics** education. This is a precursor to 'Palakkad Math Circle', an IIT Palakkad outreach initiative aimed at enhancing the level of mathematical education in schools around Palakkad. This is based on 'Mathematical Circles', a highly successful pedagogical model with origins in Eastern Europe.

IIT Palakkad would like to conduct a pilot run of the Math Circle in a few selected schools during Jan-Feb 2020. A group from IIT Palakkad can visit the schools and organise a session at the school. We hope that this workshop will provide a platform to plan and organize this activity.

Contact
mathcircle@iitpkd.ac.in

For registration please visit
https://forms.gle/ oVnPDwcRzVTvgR9d7

IIT PALAKKAD

PALAKKAD MATH CIRCLE
IIT PALAKKAD

Programme

Date: 14.12.2019
Venue: Samagatha, 203
Transit Campus, Kanjikode
IIT Palakkad

9.00: Reporting time

9.30 - 9.40: Opening remarks,
Prof. P. B. Sunilkumar,
IIT Palakkad

9.40 - 10.40: Global Math Circle
- An Experience Sharing,
Ms. Jayasree Subramanian,
HBCSE, TIFR Mumbai

10.45 - 11.45: Experiences and Learnings
from Math Clubs,
Dr. Shailaja D Sharma,
NIAS, Bangalore

11.45 - 12.00: Break

12.00 - 13.00: Learning mathematics by
doing projects,
Prof. R. Ramanujam,
IMSc Chennai

13.00 - 14.00: Lunch Break

14.00 - 16.00: Planning and
informal discussions

What is a Math Circle?

Thirty to forty high school students meet with a mathematician for a couple of hours in an informal setting on weekends to work on interesting problems or topics in mathematics. Basic characteristics of these sessions are:

Engaging. The fundamental goal of a math circle session is to engage kids. The presenter finds a creative means (a game, an activity, or an enticing problem) of leading students into the topic for the day.

Interactive. Ideally a math circle gathering will resemble a kindergarten classroom more than a college lecture. Tom Davis (San Jose Math Circle) has this yardstick to score a math circle session: 1 point per minute you talk; 5 points per minute a student talks; 10 points per minute you argue with a student; 50 points per minute the students argue among themselves!

No set syllabus. The objective of a math circle is not to cover material. The main criterion for selecting topics is their potential to make an engaging session.

Accelerated learning. Many sessions will be led by professional mathematicians who would present the content at a deep level. This will help accelerate the student learning beyond their grade and also ensure that some of the occasional profound questions raised by the students get the attention they demand.

Voluntary. Participation is voluntary. There is no fear of attendance or grades.

Teacher involvement. School teachers are encouraged to participate in the sessions. The involvement of school teachers will ensure a multiplicative effect where the finer aspects of the programme will percolate to local schools. The school teachers have special training and valuable experience in working with young children and this would help the mathematicians to become more effective mentors. In turn, the school teachers would benefit from the association by being exposed to diverse and deep mathematical content.

For registration please visit
https://forms.gle/oVnPDwcRzVTvgR9d7

https://www.youtube.com/watch?v=NDMBDFQQCzc