All Girls Math Nurture Camp Report

26th December, 2021 to 1st January, 2022 (Online Camp)

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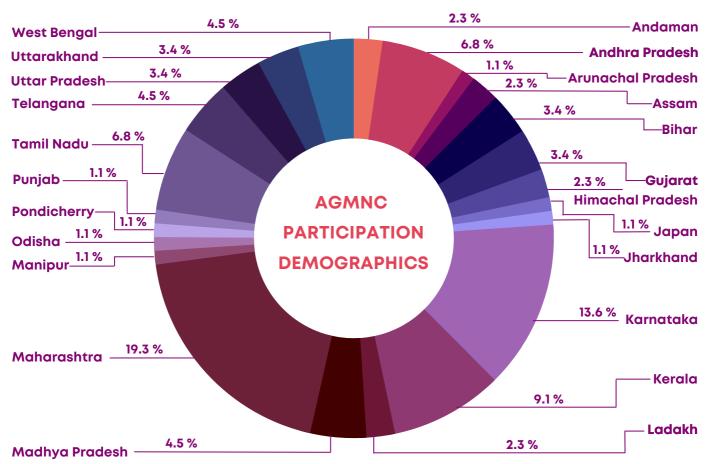


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Key Highlights

of All Girls Math Nurture Camp 2021







on All Girls Math Nurture Camp 2021

Objective of All Girls Math Nurture Camp 2021

To provide holistic guidance in Mathematics for young girls aged from 12 to 15 years who are talented in Mathematics.

All Girls Math Nurture Camp Student participation details

777 girls across India applied for the Camp. Out of which 88 girls from 19 states and 3 union territories (Ladakh, Andaman and Pondicherry) were selected for the 7- days online camp. We had a participant from Japan too!

Pedagogy and Program Schedule for All Girls Math Nurture Camp 2021

We organized a 7-day online nurture camp for middle and high school girls across the country who were shortlisted based on an entrance test that tested their logical thinking abilities.

We were privileged to have **Dr**. **Sujatha Ramdorai**, an algebraic number theorist and the first Indian to win the prestigious **ICTP Ramanujan Prize** as our chief guest for inaugural.

Mr. **T Gopalkrishna**, the Deputy Commissioner from the prestigious Navodaya Leadership Institute was present for the function as our guest of honour.

The 7 days camp typically had around 4-6 hours of formal sessions with adequate breaks in between. The sessions included guest lectures by renowned speakers from reputed institutes in the industry and academia.

Besides the sessions, the Volunteers and Teaching Assistants organized a cultural event on the last day. The participants showcased their talents in music, art, dance, and writing poems. The volunteers and faculty also joined in enthusiastically!

The camp concluded with a Valedictory Program. We were honoured to have **Dr Anuradha Doddaballapur**, German-Indian cardiovascular scientist and cricketer, as the chief guest at the valedictory.

Speakers Lineup





Shubhangee Daryapurkar

A PASSIONATE TEACHER TOOK THE STUDENTS THROUGH THE CONCEPTS IN COUNTING.



Shriprasad Tambe

DIVED DEEP INTO A CONCEPT IN NUMBER THEORY CALLED THE DIVISION ALGORITHM.



Pallavi Patil

A PASSIONATE MATH TEACHER WHO HAS BEEN STUDYING ANCIENT MATHEMATICS FOR MANY YEARS, INTRODUCED KUTTAKA TO THE PARTICIPANTS.



Swati Sircar

ASSISTANT PROFESSOR AT THE SCHOOL OF CONTINUING EDUCATION AND UNIVERSITY RESOURCE CENTER OF AZIM PREMJI FOUNDATION, STARTED HER SESSION WITH THE CLASSIFICATION OF TRIANGLES AND QUADRILATERALS.



R. Hariharan (Co-founder of RAM)

ASSISTANT PROFESSOR AT FRANKFURT SCHOOL OF FINANCE AND MANAGEMENT, INTRODUCED DATA ANALYSIS - AN AREA OF DATA SCIENCE WHICH IS USUALLY NEVER FORMALLY TAUGHT AT HIGH SCHOOL LEVEL, IN A VERY EASY AND SIMPLE WAY.

Speakers Lineup



Kavita Sutar

ADJUNCT FACULTY IN MATHEMATICS AT THE CHENNAI MATHEMATICAL INSTITUTE DELIVERED A VERY INTERESTING AND MIND-BOGGLING SESSION ABOUT VIRTUAL ROOMS AND KALEIDOSCOPES.



Saee Patil (RAM TP Alumni)

STARTED OFF BY INTRODUCING THE PROBLEM OF SORTING, AND WHERE IT CAN BE APPLIED TO THE ENTHUSIASTIC PARTICIPANTS.



Vinay Nair (Co-founder of RAM)

INTRODUCED PROOFS IN MATHEMATICS



Reshma Menon (Guest Speaker)

MATH FACULTY AT HARVARD UNIVERSITY, CONDUCTED AN AMAZING SESSION ENGAGING ALL THE PARTICIPANTS WITH INTERESTING PUZZLES EXPLORING MATHEMATICAL MODELS.



Clemency Montelle (Guest Speaker)

HISTORIAN OF MATHEMATICS FROM THE UNIVERSITY OF CANTERBURY, NEW ZEALAND TOOK THE STUDENTS DEEP INTO THE WORLD OF ANCIENT MATHEMATICS.

Speakers Lineup



Ananya Ranade

EUROPEAN GIRLS' MATHEMATICAL OLYMPIAD (EGMO) SILVER MEDALIST, SHARED HER EXPERIENCE OF MATH OLYMPIADS AND TALKED ABOUT THE LACK OF REPRESENTATION OF WOMEN IN STEM-RELATED AREAS.



Saee Patil, Sanaya Gandhi & Hetvi Pethad

DISCUSSED ABOUT 3 MATH CAMPS: MATHPATH, PROGRAM IN ALGORITHMIC AND COMBINATORIAL THINKING (PACT) AND PROGRAM IN MATHEMATICS FOR YOUNG SCIENTISTS (PROMYS).





Outcome

of the All Girls Math Nurture Camp 2021

The program helped students understand mathematics beyond the school curriculum thereby providing a more holistic view of the subject. The students were able to appreciate the application of mathematical concepts in allied areas and hence understand those subjects better. After the camp, they will be further mentored for 3 months and the best among them will be selected for RAM TP 2022 where they will get an opportunity to learn and interact with expert faculty from India and abroad. These selected students will be supported through different programs run by RAM Foundation in the upcoming months.



Continued Support

In order to ensure that the momentum gained during the camp is not lost, all the students who were part of the camp were mentored by RAM Foundation for 3 months. This included:

- Guest lectures by experts from India and Abroad
- Some of the topics include:
 - Counting
 - Divisibility tests for primes
 - Pigeon Hole Principle
 - Experiments in Probability Aniruddhan Ganesaraman
 - Concise communication: A computer science perspective
- Selection into RAM TP
 - The students who showed commitment and excellence have been selected for our flagship program - RAM TP (Raising a Mathematician Training Program). The students will have an opportunity to interact with other Math enthusiasts from across the country and attend classes and lectures that will help push their boundaries.



of the All Girls Math Nurture Camp 2021

The free training program is possible because of grass root contributions - parents of students, volunteers who donate their time as they believe in the cause of Math education and also through the support of organizations like CMI. If you would like to provide financial support or volunteer for our camps, please send us an email to

raisingamathematician@gmail.com

