

Webinar: Almost Arithmetic Progressions in “substantial” subsets of Integers by Prof. Shobha Madan (IIT Goa)

by Manjil Saikia - Sunday, October 11, 2020

<https://gonitsora.com/webinar-madan/>

Gonit Sora is organizing a webinar to be delivered by **Prof. Shobha Madan** of the Indian Institute of Technology, Goa. The details are given below.

Date: **17 October 2020 (Saturday)**

Time: **2.30 pm IST**

Title: **Almost Arithmetic Progressions in “substantial” subsets of Integers**

Abstract: In this talk I will first describe two conjectures by Erdos and Turan. The first conjecture is from 1936, and is now a famous theorem due to Szemerédi. The second conjecture is a stronger version, namely that if $A \subset \mathbb{N}$ is an infinite subset of integers such that $\sum_{j=1}^k \frac{1}{a_j}$ diverges, then for every k there exists k AP's in an arithmetic progression. This conjecture is still open in its generality.

In the last part of the talk, I will present a proof, due to J. M. Frazer, of a weaker assertion replacing AP's by approximate AP's.

About the Speaker: *Prof. Shobha Madan is a distinguished visiting professor at IIT Goa. She has held positions at IIT Kanpur and IISER Mohali before this, having done her PhD at IIT Kanpur in 1980. She is a distinguished harmonic analyst who has inspired generations of students by her teaching and expertise.*

The talk will be suitable for a general audience (college students are specially welcome), and will be held

online via Zoom. It will also be livestreamed on our [Facebook page](#).

All our talks are recorded and the recording is made available on our [YouTube channel](#) later.

If there are any questions, comments, criticisms or suggestions then please feel free to email us at events@gonitsora.com.

e-Certificates will be issued to participants who attend the talk on Zoom.

If you have already registered for any webinar by Gonit Sora in the past, you need not register again, you are already in our mailing lists (unless you have told us to remove you). For those who have not registered before, you need to register at the link below.

Please read the rules of the Zoom meeting [at this link](#), before you register. Due to a high volume of registration and emails, we will not answer queries which are already addressed in the [rules](#).

To register submit the form [at this link](#) (meeting details are usually sent one day before the event).

A list of all past and future webinars are available [at this link](#).

PDF generated from <https://gonitsora.com/webinar-madan/>.

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.