Mathematics Seminar

Department of Mathematics of UOC

cordially invites you to a guest talk by

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Titled

Mathematics in the 5th century Sri Lanka as Recorded in Buddhist Commentaries.

Date   : Friday, 17^h of February, 2017

Time   : From 3.00-4.00 pm

Venue   : FM Lab, Department of Mathematics, UOC (behind Physics building)

Abstract:

The history of mathematics in Sri Lanka is a scarcely researched area. This scarcity is well noted in two aspects. First, the schemes like business and accounting, travelling and navigation, measures, time measurement and calendars, astrology and astronomy and music and art, have been studied in Sri Lankan historical context, but not the mathematical knowledge behind those subject fields. Second, the history of mathematics in China, India and middle-east, the regions with whom Sri Lanka maintained strong relationship since pre Christian times have been discussed in great length and large volume of literature has thus been developed, highlighting our lagging on the subject.

These two aspects, noting the gaps in studying the history of mathematics in Sri Lanka, may be due to the fact that the unavailability of dedicated literature on mathematics. The conventional historical sources like chronicles, inscriptional records and the material remains are of very limited value in this endure. Attempt in this presentation is to see the possibility of tapping large amount of Buddhist literature available in Sri Lanka since the introduction of Buddhism to the island in sourcing the mathematical knowledge prevailed in the island. Specially, the focus here would be the Buddhist Commentaries of which the extant format is Pāli Commentaries formed based on the Sinhala Commentaries in 5th century (as generally accepted). The presentation will cover the number systems, fundamental mathematical operations, computation methodologies, possible knowledge on permutations and combinations and the geometric applications including Pythagorean triples, etc.