

**BCNSETS**

BARCELONA RESEARCH GROUP IN SET THEORY

BARCELONA SET THEORY SEMINAR

# Cobham recursive set functions

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**Abstract:** Cobham characterized polynomial time functions over the natural numbers as those obtained from certain simple initial functions by composition and limited recursion on notation. We introduce an analogous notion over arbitrary sets using  $\varepsilon$ -recursion, which is "limited" in a certain technical sense. We ask to characterize these so-called Cobham recursive set functions as those provably total in a natural weak set theory.

**Date:** Thursday, 16 March 2017

**Time:** 15:30

**Place:** Room T-2\*

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\* Enter the University building through the door 20 meters to the right of the main door and go straight towards the courtyard. Cross the courtyard diagonally and take the stairs to the top floor. As you exit to the courtyard's terrace you will see the T-2 sign posted on the wall, right across the terrace.