



CEMS.U.L
CENTER FOR MATHEMATICAL STUDIES

SEMINÁRIO

LÓGICA MATEMÁTICA

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Laver tables and Large Cardinals

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ABSTRACT:

Laver tables are the multiplication tables of finite algebras that satisfy the left self-distributive law. The rows of Laver tables are periodic and their periods increase very slowly with the cardinality of the algebra. The only known proof that their periods actually tend to infinity as a function of the cardinality of the algebras requires the use of strong set-theoretic hypotheses. Large cardinals that are very close to inconsistency.

In this talk I will present the proof that the periods of the rows of Laver tables tend to infinity. I will give all relevant definitions so no prior knowledge of the concepts involved will be required to follow the proof.

This is a joint session with the Computational Complexity Group. The goal is to go through the proof without time pressure, so the seminar may be longer than usual. The room is booked from 2:00 to 5:00.