Computability theory and trees

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Abstract

Computability theorists have developed powerful techniques for studying computational properties of the natural numbers. These techniques can often be applied to other algebraic structures once they are suitably coded. In particular, they provide one method for measuring the effectiveness (or ineffectiveness) of particular constructions and theorems. In this talk, we will use countable trees to illustrate these ideas. No previous background in logic or computability theory will be assumed.

This talk should be accessible to graduate students.