## PIMS-ULethbridge Distinguished Visitor: JEAN-MARC DESHOUILLERS (Université Bordeaux)

## **AN INTRODUCTION TO AUTOMATIC SEQUENCES**

A mini course in four lectures hosted at the University of Lethbridge | April 4-11



## **JEAN-MARC DESHOUILLERS**

Professor Deshouillers is a world expert in analytic, combinatorial, additive, and probabilistic number theory. He has published over a hundred influential research papers and has trained an exceptional generation of analytic number theorists in France.

LECTURE 1: INTRODUCTION Wednesday, April 4 | 12:00 - 12:50pm | Room B756

LECTURE 2: DEFINITION AND CHARACTERISATIONS OF AUTOMATIC SEQUENCES Friday, April 6 | 12:00 - 12:50pm | Room B650

LECTURE 3: ALGEBRAICITY OF Q-AUTOMATIC SEQUENCES: CHRISTOL'S THEOREM Monday, April 9 | 2:00 - 2:50pm | Room B660

LECTURE 4: AUTOMATIC SEQUENCES AND SARNAK'S CONJECTURE Wednesday, April 11 | 12:00 - 12:50pm | Room B756

The first introductory lecture may be followed as a colloquium talk, independent of the subsequent lectures. Lectures 1 and 2 are independent. Lectures 3 and 4 are independent, but each of them depends on Lecture 2. The lectures will be completed by some "tutorials" on a very flexible programme, e.g. to give requested details, to present examples of automatic and non-automatic sequences, invertible automata, some hints of the proof of Cobham's theorem...

## For more details visit: <u>http://www.pims.math.ca/scientific-event/180404-pudvjmd</u>



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