Joint Seminar of Computer Security Division and Statistical Engineering Division

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Patterns in Words

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Counting words that satisfy various restrictions on subwords (blocks of consecutive symbols) is an extremely rich subject. There are various applications to comma-free codes, games, pattern matching, and other subjects. The main tools that are used come from generating functions and probability theory.

Andrew Odlyzko is Head of the Mathematics and Cryptography Research Department at AT&T Labs (one of the R&D centers resulting from the breakup of AT&T Bell Labs), and also Adjunct Professor in the Faculty of Mathematics at University of Waterloo. His professional interests include computational complexity, cryptography, number theory, combinatorics, coding theory, analysis, and probability theory. In recent years he has also been working on electronic publishing.

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