

## PREFACE

BIBLIOTEKA  
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This special issue was originally suggested by the late Helena Rasiowa.

The topic, formal language theory, is very well motivated both by historical reasons and by currently rising interest in the field. Formal language theory can be considered to be the oldest branch of theoretical computer science. The beginning is usually traced back to the work of the Norwegian Axel Thue in the early years of this century.

The need for a formal grammatical description of specific languages arises in various scientific disciplines. This makes formal language theory a really interdisciplinary area of science. The oldest trends come from pure mathematics. Other trends include models for natural and artificial languages, program verification, compiler construction, analysis of concurrent systems, and developmental models for simple organisms. Some recent grammatical models concern artificial life. Many of the latter have turned out to be very illustrative in computer graphics.

The general interest in the field has recently been rising. This can be seen from special issues other than this one, from numerous contributions to journals and conferences, as well as from a special new series of conferences devoted to the area.

The current issue presents research from a number of language-theoretic areas, ranging from classical issues with an algebraic flavor to many recent developments. The contributions, although originally on an invitational basis, have been refereed as usual. We would like to thank the contributors and referees for good cooperation.

Grzegorz Rozenberg

Arto Salomaa