

## Contents

Preface	page ix
<b>Surveys</b>	<b>1</b>
Playing games with algorithms: Algorithmic combinatorial game theory ERIK D. DEMAINE AND ROBERT A. HEARN	3
Advances in losing THANE E. PLAMBECK	57
Coping with cycles AARON N. SIEGEL	91
On day $n$ DAVID WOLFE	125
<b>Standards</b>	<b>133</b>
Goal threats, temperature, and Monte-Carlo Go TRISTAN CAZENAIVE	135
A puzzling Hex primer RYAN B. HAYWARD	151
Tigers and Goats is a draw LIM YEW JIN AND JURG NIEVERGELT	163
Counting liberties in Go capturing races TEIGO NAKAMURA	177
Backsliding Toads and Frogs AARON N. SIEGEL	197
Loopy games AARON N. SIEGEL	215
A library of eyes in Go, I: A life-and-death definition consistent with bent-4 THOMAS WOLF	233
A library of eyes in Go, II: Monolithic eyes THOMAS WOLF AND MATTHEW PRATOLA	249

<b>Complexity</b>	<b>269</b>
The complexity of Dyson Telescopes	271
ERIK D. DEMAINE, MARTIN L. DEMAINE, RUDOLF FLEISCHER, ROBERT A. HEARN, AND TIMO VON OERTZEN	
Amazons, Konane, and Cross Purposes are PSPACE-complete	287
ROBERT A. HEARN	
<b>Impartial</b>	<b>307</b>
Monotonic sequence games	309
M. H. ALBERT, R. E. L. ALDRED, M. D. ATKINSON, C. C. HANDLEY, D. A. HOLTON, D. J. MCCAUGHAN, AND B. E. SAGAN	
The game of End-Wythoff	329
AVIEZRI S. FRAENKEL AND ELNATAN REISNER	
On the geometry of combinatorial games: A renormalization approach	349
ERIC J. FRIEDMAN AND ADAM S. LANDSBERG	
More on the Sprague–Grundy function for Wythoff’s game	377
GABRIEL NIVASCH	
<b>Theory of the small</b>	<b>411</b>
Yellow-Brown Hackenbush	413
ELWYN BERLEKAMP	
Ordinal partizan End Nim	419
ADAM DUFFY, GARRETT KOLPIN, AND DAVID WOLFE	
Reductions of partizan games	437
J. P. GROSSMAN AND AARON N. SIEGEL	
Partizan Splittles	457
G. A. MESDAL III	
<b>Columns</b>	<b>473</b>
Unsolved problems in Combinatorial Games	475
RICHARD K. GUY AND RICHARD J. NOWAKOWSKI	
Bibliography of Combinatorial Games	501
AVIEZRI S. FRAENKEL	