

# Contents

Preface .....	v
Foreword by Alain Connes .....	vii
<i>Caterina Consani</i>	
Noncommutative geometry and motives (à quoi servent les endomotifs?) .....	1
<i>Vincent Rivasseau and Fabien Vignes-Tourneret</i>	
Renormalisation of non-commutative field theories .....	39
<i>David Sauzin</i>	
Mould expansions for the saddle-node and resurgence monomials .....	83
<i>Yves André</i>	
Galois theory, motives and transcendental numbers .....	165
<i>Kurusch Ebrahimi-Fard and Dominique Manchon</i>	
The combinatorics of Bogoliubov's recursion in renormalization .....	179
<i>Michael E. Hoffman</i>	
(Non)commutative Hopf algebras of trees and (quasi)symmetric functions .....	209
<i>Frédéric Menous</i>	
Formal differential equations and renormalization .....	229
<i>Stefan Weinzierl</i>	
Feynman integrals and multiple polylogarithms .....	247