Infinite Computations

Chapter	**Slides**	**Topic**
Chapter 1	1	Introduction
	2	DBA, NBA, ω-regular
	3	BA, ω-regular, GBA
	4	BA closure properties
	5	closure negation
Chapter 2	6	LTL
	7	LTL
	8	LTL, S1S
	9	S1S, $S1S_0$
	10	S1S, Model Checking
	11	Logic decidability
Chapter 3	12	Muller
	13	Muller, Rabin
	14	Rabin, Parity
	15	Parity
Chapter 4	16	Landweber's Theorem, E-Aut., A-Aut., coBA
	17	Landweber's Theorem
Chapter 5	18	Landweber's Theorem, weak BA, minimization
	19	minimization
	20	Application of minimization
Chapter 6	21	ABA
	22	ABA
	23	ABA
Chapter 7	24	Cantor Space
	25	Borel Hierarchy

Infinite Games

Chapter	Slides	Topic
	1	Introduction
Chapter 1	2	Reachability, Safety
Chapter 2	3	Strategy automata, game reductions
Chapter 3	4	Staiger-Wagner, weak Parity, Büchi
	5	Büchi
Chapter 4	6	Büchi, automata minimzation, Muller, Parity
	7	Muller, Parity
	8	Muller, Parity
	9	Parity
	10	Split Trees
	11	Split Trees, Rabin, Streett
Chapter 5	12	Split Trees, LTL, S1S
	13	Church Synthesis
Chapter 6	14	Infinite Trees, BTA
	15	Muller TA, Parity TA, DBTA
Chapter 7	16	TA complementation
Chapter 8	17	TA complementation, TA emptiness, regular trees
Chapter 9	18	TA emptiness, regular trees, S2S, $S2S_0$
	19	WMSO, MSO interpretations
Chapter 10	20	MSO interpreations, Mean Payoff Games
	21	Mean Payoff Games
	22	Mean Payoff Games
Chapter 11	23	Mean Payoff Games, Gale-Stewart, Borel Hierarchy
	24	Borel Hierarchy, Wadge Game
	25	Set Theory

Tree Automata

Chapter	Slides	Topic
Chapter 1	1	Introduction, Trees, DTA
	2	NTA, ↓DTA, ↓NTA
	3	Pumping principle, Myhill-Nerode
	4	Emptiness, Minimization
Chapter 2	5	Minimization, DUTA, NUTA, FCNS
	6	FCNS, XML Schema, DTD
	7	XML Schema, DTD, EDTD
Chapter 3	8	XML Schema, Regular Tree Grammar / Relax NG, MSO
	9	MSO, FO, Regular expressions
Chapter 4	10	Regular expressions, DTWA, TWA
	11	TWA, Complementation, BCG
	12	XPath
Chapter 5	13	Tree Transducers (BTT, TDT)