

Cambridge University Press

978-0-521-11113-3 - Entropy of Hidden Markov Processes and Connections to Dynamical Systems: Papers from the Banff International Research Station Workshop

Edited by Brian Marcus, Karl Petersen and Tsachy Weissman

Table of Contents

[More information](#)

Contents

	Introduction	<i>page</i> 1
1	Hidden Markov processes in the context of symbolic dynamics	5
	Mike Boyle, University of Maryland, College Park Karl Petersen, University of North Carolina, Chapel Hill	
2	On the preservation of Gibbsianness under symbol amalgamation	72
	Jean-René Chazottes, École Polytechnique, Palaiseau Edgardo Ugalde, Universidad Autónoma de San Luis Potosí	
3	A note on a complex Hilbert metric with application to domain of analyticity for entropy rate of hidden Markov processes	98
	Guangyue Han, University of Hong Kong Brian Marcus, University of British Columbia Yuval Peres, University of California at Berkeley	
4	Bounds on the entropy rate of binary hidden Markov processes	117
	Erik Ordentlich, Hewlett-Packard Laboratories, Palo Alto Tsachy Weissman, Stanford University	
5	Entropy rate for hidden Markov chains with rare transitions	172
	Yuval Peres, Microsoft Research, Redmond Anthony Quas, University of Victoria, British Columbia	

Cambridge University Press

978-0-521-11113-3 - Entropy of Hidden Markov Processes and Connections to Dynamical Systems: Papers from the Banff International Research Station Workshop

Edited by Brian Marcus, Karl Petersen and Tsachy Weissman

Table of Contents

[More information](#)

vi

Contents

6	The capacity of finite-state channels in the high-noise regime	179
	Henry D. Pfister, Texas A&M University	
7	Computing entropy rates for hidden Markov processes	223
	Mark Pollicott, University of Warwick	
8	Factors of Gibbs measures for full shifts	246
	Mark Pollicott, University of Warwick	
	Thomas Kempton, University of Warwick	
9	Thermodynamics of hidden Markov processes	258
	Evgeny Verbitskiy, Leiden University and University of Groningen	