

2006 Markov Anniversary Meeting:

The Markov Anniversary Meeting, June 12-14, 2006 was the fifth in a series of conferences devoted to the Numerical Solution of Markov Chains (NSMC). The prior four NSMC conferences were held in 1990, 1995, 1999, and 2003. The first two conferences were held in Raleigh, North Carolina, the third moved overseas to Zarazoga, Spain, and the fourth was held in Urbana-Champaign, Illinois.

This fifth and most recent Markov meeting occurred sooner than the usual 4-5 year schedule in order to celebrate two very important events: the 150th anniversary of Andrei A. Markov's birth and the 100th anniversary of his work on his chains. This special Markov Anniversary Meeting was held at the College of Charleston in historic Charleston, SC. The scope of the meeting was expanded to incorporate Markov work beyond the usual NSMC topics. Thus, this proceedings contains several papers describing the diverse applications of Markov's chains in diverse fields from web search and telecommunications to population and language modeling.

We were pleased to receive a wide variety of quality papers for presentation. There was, rightfully, much anticipation for the keynote talk given by Eugene Seneta the life, work, and contemporaries of A. A. Markov. His work as a dedicated mathematician and historian fills the need for a complete paper about Markov. With the historical stage set, we turned to present uses and extensions of Markov's chains. Papers discuss Markov reward processes and Markov bounds, while another group of papers cover the use of chains in queueing theory. A third bundle of papers examines the techniques for analyzing enormous chains with the help of Kronecker algebra. Such techniques connect nicely with one of today's most famous applications of Markov chains, the PageRank chain used by Google to rank webpages. Several invited speakers discussed the mathematics behind PageRank and other web search techniques. The proceedings conclude with a section devoted to applications of Markov chains.

We are proud to present a body of work that represents a continuation of A. A. Markov's work over a century ago. Of course, the resulting proceedings is the product of many contributors. First, we thank this year's Program Committee members, many of whom held multiple roles as publicists, promoters, contributing authors, reviewers, and attendees. Finally, we thank all submitting authors and participants.

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