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# JOURNAL OF APPLIED PROBABILITY

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## EDITORIAL: THE APPLIED PROBABILITY JOURNALS 2010–2012

The Applied Probability Trust (APT) has since 1971 published three-yearly indexes to *Journal of Applied Probability* (JAP) and *Advances in Applied Probability* (AAP). As well as listings of papers by author names and by key subjects, the three-yearly indexes also contained an editorial preface with publishing statistics and other information. As of 2013, the tradition of publishing indexes has been discontinued since their role has largely been taken over by online databases. The editorial material will however continue to appear in JAP.

This editorial covers the years 2010–2012, during which time the APT published Volumes 47–49 of JAP and Volumes 42–44 of AAP, each of four issues of approximately 300 pages each. The three volumes of JAP included a total of 256 papers (of which 31 are short communications) occupying 3609 pages, corresponding to 14.1 pages per paper. The figures for AAP are 162 papers, 3602 pages, and 22.2 pages per paper.

The number of yearly submissions has increased by 10–15% over recent years. Because the number of pages per volume has remained constant, the backlog has grown substantially, and the time from acceptance to publication is currently 10–12 months. Accordingly, the current editorial policy is to carefully adjust the length of the papers to their substance. There is no fixed page limit, but typically a paper of more than 25–30 output pages will have to be outstanding to reach acceptance. About 30% of submissions are rejected instantaneously, most often as being inappropriate for the journals: too theoretical, purely applied or empirical, more of an engineering or statistics paper, etc. However, in some cases the reason could also be a lack of either application relevance or probabilistic substance. The ideal is of course that a paper should cover both aspects, but in some cases a substantial strength in one may compensate for weakness in the other. Papers in areas such as queueing, finance, insurance risk, and reliability are also often judged to be more suitable for the specialized journals in these fields.

The percentages of papers originating in (groups of) countries are given in Table 1 and show essentially the same picture as in previous years with only minor deviations.

Table 2 gives a list of papers grouped according to subject area. Each paper is assigned to one area only. This of course causes some ambiguity since many papers have equal weights in two or more of the categories, or may be difficult to classify, and for this reason one should not put too much weight on the deviations from the 2007–2009 statistics. One development that is genuine is, however, the increase in the areas of random graphs, particle

TABLE 1: Percentages of papers originating in each group of countries.

	1995–1997	1998–2000	2001–2003	2004–2006	2007–2009	2010–2012
USA and Canada	31	25	25	25	23	24
UK	10	8	8	10	9	9
Western Europe	32	40	40	36	41	40
Eastern Europe	5	4	7	5	3	4
Japan	2	2	3	3	2	2
Australia and NZ	7	8	6	6	6	5
Middle East, Africa, Asia	11	10	11	13	14	14
South and Central America	2	2	1	2	2	3

TABLE 2: Number of papers published in JAP and AAP by selected subject.

	2007–2009	2010–2012
Branching processes	27	26
Combinatorial probability, urn schemes	22	16
Decision problems not in other categories	14	7
Epidemics	12	10
Finance	30	27
Genetics	10	9
Heavy tails	9	9
Insurance risk	20	9
Large deviations	8	7
Lévy processes	13	16
Long-range dependence, fractals	13	12
Markov decision processes, game theory	17	10
Monte Carlo simulation	18	10
Optimal stopping	13	14
Pattern and sequence analysis	15	8
Queueing	35	32
Random graphs, particle systems, mathematical physics	14	35
Random walks, renewal theory	10	8
Reliability	19	21
Markov process problems not in other categories	20	30
SGSA	43	37
Stochastic ordering	9	16
None of the above	32	49

systems, and mathematical physics. Branching processes and other biological applications, queueing including networks and communications systems, reliability, finance, insurance risk, and Markov processes in a wide range of settings remain cornerstones of the journals. Stochastic geometry and statistical applications (SGSA) plays a special role within AAP, having a separate section since 1994.

I would like to take this opportunity to express my gratitude for the invaluable work done by the board members (who play an increasing role in the editorial process) and the referees, who receive far too little credit for the anonymous work they are doing.

Aarhus University, Denmark  
July 2013

SØREN ASMUSSEN