

## What do we publish in AMC?

Recently we had to decline a submission to AMC of a paper that we were unable to handle. We did not even send it to a quick assessment, let alone to referees. The reason was not the quality of the paper, but its content and scope, which were far outside the interests of our editors, referees and authors. Our declared scope is clear: we are looking for high quality papers that cover at least two different subject fields, at least one of which is within discrete mathematics. Some easy statistical analysis tells us to what extent this has been realised in practice, and we hope this will be also of help to authors who are considering AMC as a potential venue for their papers.

In the first seven years of AMC we have published 204 papers, totalling 2872 pages. This is a little more than 14 pages per paper. The minimum average page length so far was 12.05, in volume 1, while the maximum average page length was 16.20, in volume 5. Approx. 43% of these papers used at least two different 2-digit MSC codes, while 52% used at least two different 3-letter MSC codes. A little over 85% of the papers used both primary and secondary classifications.

A large majority of the primary 2-digit classification codes came under 05 (Combinatorics), followed by 52 (Convex and discrete geometry), 51 (Geometry) and 20 (Group theory and generalizations). In decreasing order, the other 2-digit primary codes were 57 (Manifolds and cell complexes), 68 (Computer science), 06 (Order, lattices, ordered algebraic structures), 91 (Game theory, economics, social and behavioral sciences), 01 (History and biography), 92 (Biology and other natural sciences) and 47 (Operator theory).

The ten most frequent 3-letter classification codes were: 05C (Graph theory), 05E (Algebraic combinatorics), 20B (Permutation groups), 52B (Polytopes and polyhedra), 05B (Designs and configurations), 51E (Finite geometry and special incidence structures), 52C (Discrete geometry), 57M (Low-dimensional topology), 92E (Chemistry), 20F (Structure and classification of infinite and finite groups), and 06A (Ordered sets).

The most frequent pairs of 5-letter MSC codes declared in a paper are shown as edges in the figure below, which comes from some analysis performed by Vladimir Batagelj using Pajek. The threshold value for inclusion of a pair as an edge was set to 2.





Among the 5-letter classifications by far the most frequent were 05C25 (Graphs and abstract algebra), 05C10 (Planar graphs; geometric and topological aspects of graph theory), followed by 05C15 (Colorings of graphs and hypergraphs), 05E18 (Group actions on combinatorial structures), 05C12 (Distance in graphs), 20B25 (Finite automorphism groups of algebraic, geometric and combinatorial structures), 05C50 (Graphs and linear algebra), 05C76 (Graph operations), 05C75 (Structural characterization of families of graphs), 05C45 (Eulerian and Hamiltonian graphs), 05E30 (Association schemes, strongly regular graphs), and 05C85 (Graph algorithms).

These figures show that we publish mostly papers in algebraic and topological graph theory, with discrete and convex geometry also having significant presence in AMC. We note, however, that papers with less frequent MSC codes still play an important role in world mathematics. According to MathSciNet at the time of writing of this editorial, the most highly cited paper in 05C76 (Graph operations) was published in our journal.

Dragan Marušič and Tomaž Pisanski Editors In Chief