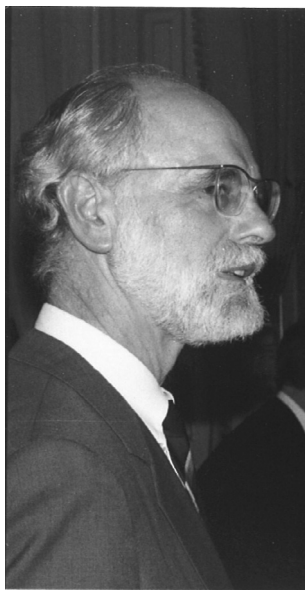Editorial
T.A. Springer (1926–2011)

This multi-volume Special Issue is dedicated to the memory of Tonny Albert Springer, one of the leading Dutch algebraists, who passed away on 7 December 2011. He was born on 13 February 1926 in Scheveningen and, after spending the war years working as civil servant for Dutch Mail whilst collecting certificates to become a mathematics teacher, from 1945 on studied mathematics at the re-opened university in Leiden with Kloosterman, completing his Ph.D. on symplectic transformations in 1951. He started his career in Nancy and Leiden, and joined Utrecht University in 1955, swiftly becoming full professor of "algebra and analysis", and supervising a total of 16 Ph.D. students during his career. In 1964 he was elected a member of the Royal Netherlands Academy. He was a sectional speaker at ICM twice.

A few years ago, the Mathematical Institute at Utrecht installed the "T.A. Springer Room", a location for mathematical discussions and small seminars, separated from the corridor by a glass pane prominently featuring a graphical representation of the Springer correspondence. The room contains a plaque explaining the correspondence, as well as the following biographical information: "In Nancy, Springer proved his eponymous theorem on quadratic forms. He was

Fig. 1. The Springer fibration on the glass pane in the T.A. Springer Room at Utrecht University.

one of the founders of the theory of algebraic groups. With Steinberg, he worked on conjugacy classes of semi-simple algebraic groups. He is famous for his discovery of the action of the Weyl group as monodromy groups of certain fibrations associated to algebraic groups, now called 'Springer fibrations'. With Borel, he worked on rationality questions for algebraic groups. He also worked on Lusztig's theory of character sheaves, complex reflection groups, Hecke algebras and compactifications of symmetric spaces. He wrote very influential textbooks on linear algebraic groups, invariant theory, and Jordan algebras."

His students and colleagues remember Springer as a composed, modest, and friendly person, a widely knowledgeable scholar of mathematics, with a clear view of what is beautiful and meaningful in mathematics (and, we would like to add, what is right and wrong in administration). Former Utrecht mathematics student Jan Beuving, now a well-known songwriter and stand-up comedian in The Netherlands, included a sketch in one of his theater programmes where he sits browsing a book in an original chair from the mathematics library, when suddenly 80 year old, well dressed and well groomed professor Springer comes in, finds a book, and sits down in the chair next to him, as mirror image. "There we were: two mathematical extremes. He the maximum, I the minimum." The overhauled chair is preserved at the institute, with the (Dutch) text of the sketch hidden in the padding.

The varied contributions to this special issue attest that Springer's mathematical legacy and way of doing mathematics lives on and will be us for a long time to come. We, as editors, were pleasantly surprised by the overwhelming number of contributions, and struck by the many warm personal remembrances that we received in our mailbox from (potential) contributors. We have chosen to include one such anecdote, of David Kazhdan, illustrating Springer's composure and sense of humor: "I met Tonny on my first trip outside the USSR at the 1971 representation theory school in Budapest. On the first day, I found that Tonny had a hand-written text of the lectures he was planning to teach in the Fall. Tonny lent me these notes to look through in the evening. I put the text in my bag, which I put on the top of a refrigerator. The bag also contained a bottle of vodka that I brought from Moscow. At that time—at least in Hungary—, the moment a refrigerator cycled on and off, it jumped; so the next morning, I found my bag on

the floor, the vodka bottle broken, and the right hand sides of some hundred pages completely white; the ink dissolved by the vodka. When I brought the pages back to Tonny, his reaction was: 'A good smell'."

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