

A. Schrijver, Honorary D. Math Citation

Honorary D. Math Citation for Lex Schrijver
University of Waterloo
Convocation, June, 2002

Mr. Chancellor, I present Alexander Schrijver.
One of the world's leading researchers in discrete optimization, Alexander Schrijver is also recognized as the subject's foremost scholar.

A typical problem in discrete optimization requires choosing the best solution from a large but finite set of possibilities, for example, the best order in which a salesperson should visit clients so that the route travelled is as short as possible. While ideally we would like to have an efficient procedure to find the best solution, a famous result of the 1970s showed that for very many discrete optimization problems, there is little hope to compute the best solution quickly. In 1981, Alexander Schrijver and his co-workers, Groetschel and Lovasz, revolutionized the field by providing a powerful general tool to identify problems for which efficient procedures do exist.

Professor Schrijver's record of establishing groundbreaking results is complemented by an almost legendary reputation for finding clearer, more compact derivations of results of others. This ability, together with high standards of mathematical rigour and historical accuracy, has made him the leading scholar in discrete optimization. His 1986 book, *Theory of Linear and Integer Programming*, is a landmark, and his forthcoming three-volume work on combinatorial optimization will certainly become one as well.

Alexander Schrijver was born and educated in Amsterdam. Since 1989 he has worked at CWI, the National Research Institute for Mathematics and Computer Science of the Netherlands. He is also Professor of Mathematics at the University of Amsterdam.

Discrete optimization lies at the crossroads of combinatorics and optimization, and Waterloo is home to a department devoted to these two subjects. Through his research and writing, and in many more direct ways, Professor Schrijver has had a strong positive influence at the University of Waterloo.

Mr. Chancellor, in recognition of his outstanding contributions to mathematics, I request that you confer the degree Doctor of Mathematics, *honoris causa*, upon Alexander Schrijver.