The partially disjoint paths problem

The partially disjoint paths problem asks for paths $P_1, \ldots, P_k$ between given pairs of terminals, while certain pairs of paths $P_i, P_j$ are required to be disjoint. In his talk, with the help of combinatorial group theory, Schrijver will show that, for fixed $k$, this problem can be solved in polynomial time for planar directed graphs. He will also discuss related problems. No specific prior knowledge is required.

Prof. Dr. Lex Schrijver is a Dutch mathematician and computer scientist. He is a professor of discrete mathematics and optimization at U Amsterdam. In 2005, he won the Spinoza Prize of the NWO, the highest scientific award in the Netherlands, for his research in combinatorics and algorithms. Later in the same year he became a Knight of the Order of the Netherlands Lion and, in 2012, he became a fellow of the American Mathematical Society.

Schrijver’s talk at the BMS Friday Colloquium is part of the workshop “Combinatorial Optimization and Graph Algorithms” dedicated to Prof. Dr. Rolf H. Möhring on the occasion of his retirement.