DALE ROLFSEN, UBC, Vancouver, BC V6T 1Z2
Ordering knot groups

Classical knot groups are known to be right-orderable, by a theorem of Howie and Short. This means that the elements of the group may be given a strict total ordering which is invariant under right multiplication. Some knot groups can be given an ordering which is invariant under multiplication on both sides; the figure-eight is an example, as shown by B. Perron and the speaker. Others, such as torus knot groups, do not enjoy a 2-sided ordering. For most knots, the question of the existence of 2-sided orderings is still open. I will discuss this problem, including some new techniques, the conjecture that all knot groups are virtually orderable, and why we should care about the question.