1036-49-15 **Bernd Kawohl*** (`kawohl@math.uni-koeln.de`). *The Faber-Krahn inequality for the p-Laplacian operator in a Minkowski metric.*

The Faber-Krahn inequality states that among all domains of given volume the ball has minimial first Dirichlet-Laplace eigenvalue. In my lecture I extend this result to general p-Laplacians with $p \in (1, \infty)$ and to general Minkowski metrics. Particular attention is given to the limits $p \to 1$ and $p \to \infty$. This is joint work with M.Belloni, V. Ferone, P. Juutinen and M.Novaga. (Received November 13, 2007)