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A Subgroup Theorem for Homological Dehn Functions

Let G be a group and let H be a subgroup of G . If G admits a finite $(n + 1)$ -dimensional $K(G, 1)$ and H is of type F_{n+1} then $FV_H^{n+1} \preceq FV_G^{n+1}$ where FV_H^{n+1} and FV_G^{n+1} are the n -dimensional homological Dehn functions for G and H . We give basic definitions, discuss our result and state some consequences. If time permits we will discuss an extension to groups with torsion. This is joint work with Eduardo Martinez-Pedroza.