Asymptotic geometry of Banach spaces and uniform quotient maps

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We consider the conditions under which the existence of a uniform quotient map between two given Banach spaces is not possible. The main ingredient comes from the observation that the modulus for the property (β) of Rolewicz for the space $\left| p\right| (1<p<\\infty) does not permit the existence of a uniform quotient map from$ $<math>\left| p\right| to \end{vell_q}$ for any $1<p<q<\\infty$. We finetune this result by exploring deeper the asymptotic geometry of the two Banach spaces X and Y under which the existence of a uniform quotient map $T:X\to Y$ is not possible.

The talk will be a combination of a joint work with Vegard Lima and a joint work in progress with Stephen Dilworth, Denka Kutzarova, and Gilles Lancien.