## Some remarks on mappings of the Hilbert ball

## Mon/Epcos 17:30–17:50

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We talk about an analogue of Alexander's Theorem for holomorphic mappings of the unit ball in a complex Hilbert space: Every holomorphic mapping which takes a piece of the boundary of the unit ball into the boundary of the unit ball and whose differential at some point of this boundary is onto is the restriction of an automorphism of the ball (it is actually enough to assume that the mapping is only Gâteaux-holomorphic).

We will also show in some examples why the differential condition is necessary (it is not in the finite-dimensional case).

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