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Scott B. Simon* (ssimon@math.purdue.edu), Department of Mathematics, Purdue University, 150 North University Street, West Lafayette, IN 47907-2067. *A Dolbeault isomorphism theorem in infinite dimensions.*

A real analytic version of the Dolbeault isomorphism theorem holds for open subsets of complex Banach spaces with a so-called "unconditional basis". The main step in the proof is the theorem that any open subset of such a Banach space X has a pseudoconvex neighborhood basis in the complexification of X . (Received February 01, 2006)