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Carleson potentials and analytic embedding in the unit ball of C^n

We present a simple proof of the analytic Carleson Embedding Theorem on the unit ball in C^n . The only technical tool used is Green's formula. The starting point is that every Carleson measure gives rise to a bounded function with certain nice properties that itself gives rise to a new, related Carleson measure that allows for a simple embedding. The proof improves the best known embedding constant for small dimension drastically, but does not give good constants for large dimension.