1026-52-29 **Mark W Meckes*** (mwmeckes@math.cornell.edu), 310 Malott Hall, Department of Mathematics, Cornell University, Ithaca, NY 14853. *On the measure-theoretic Dvoretzky's theorem.*

Recently Klartag showed that any convex body has high-dimensional marginals (projections of its uniform measure) which are nearly Gaussian. This result can be interpreted as a measure-theoretic analogue of Dvoretzky's theorem, and as in Dvoretzky's theorem the existence of nice projections is proved nonconstructively.

In contrast to this and to the situation for Dvoretzky's theorem, we will show that for many convex bodies it is possible to identify specific nearly Gaussian marginals. (Received January 18, 2007)