1146-52-376 Ferenc Fodor, Márton Naszódi and Tamás Zarnócz* (tzarnocz@math.u-szeged.hu). On the volume bound in the Dvoretzky-Rogers lemma.

The classical Dvoretzky–Rogers lemma provides a lower bound on the maximal volume of parallelotopes spanned by d vectors from a John decomposition of the identity in d-dimensional space. Using the expectation of the squared volume of parallelotopes spanned by d independent random vectors distributed according to discrete isotropic measures, we improve the volume estimate in the Dvoretzky–Rogers lemma. (Received January 27, 2019)