1077-42-2052   **Sergei Treil*** (`treil@math.brown.edu`). *H^1 and dyadic H^1 in multiparameter settings.*

It is well-known that in the harmonic analysis in multi-parameter settings the iteration in the number of variables usually does not work: the multi-parameter BMO is not obtained by iterating one parameter case, for example.

I will discuss a situation where such iteration does work, namely a (known before) result connecting "real" H^1 and dyadic H^1. I'll present a very simple proof, which can be easily iterated to several variables.

I'll also discuss why BMO is a subset of the dyadic BMO in the multi-parameter case: this result can be obtained essentially by iterating the (trivial) one-parameter result. (Received September 21, 2011)