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N. Shirokova* (nadya@math.stanford.edu), 450 Serra Mall, Bld. 380, Mathematics Department, Stanford, Palo Alto, CA 94305. *Moduli space of 4-manifolds and the universal Seiberg-Witten invariant*. Preliminary report.

We construct the configurational space points of which correspond to smooth stably parallelizable 4-manifolds embedded into an infinite dimensional euclidean space. Connected components of the complement to the discriminant are homotopy equivalent to the classifying group of diffeomorphism of the corresponding 4-manifold. We consider the universal Seiberg-Witten invariant as a step function on chambers and construct its family version. We also introduce a simple 4-manifold invariant of finite type one. (Received August 13, 2006)