Flows of weights and automorphism groups of real a.f.d. factors of type $III_\lambda, 0 < \lambda < 1$. Preliminary report.

It is well-known that for each $\sigma$-finite factor $m$ of type $III_\lambda, 0 < \lambda < 1$ there exist two non-isomorphic real sub-factors of $m$ of type $III_\lambda$, generating $m$. We calculate the flows of weights of those real factors. Using the flows of weights, we study the groups of automorphisms of real approximately finite dimensional (a.f.d.) factors of type $III_\lambda$ comparing with (complex) a.f.d. factors of type $III_\lambda$. (Received September 18, 2007)