every $\mu \in W$, including these ergodic ones, because S is minimal and every $\mu \in W$ is t-invariant, having therefore an invariant support set.

REFERENCES

[BH] J. R. Blum and L. Hanson, *On invariant probability measures.* I, Pacific J. Math. **10** (1960), 1125–1129.

[R] W. Rudin, *Averages of continuous functions on compact spaces*, Duke Math. J. **25** (1958), 195–204.

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HOMOGENEOUS NONNEGATIVE SYMMETRIC QUADRATIC TRANSFORMATIONS

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Some recent work [2], [3] has led to almost enough knowledge about nonnegative symmetric homogeneous quadratic transformations to merit the name theory. This note presents one interesting fact, Theorem 6, which states that in a sense almost all such transformations $\mathfrak{T}$ give rise to a sequence $\{\mathfrak{T}^0, \mathfrak{T}^1, \mathfrak{T}^2, \cdots\}$ of iterates which converges pointwise, together with a map of the way stations leading to it. There are very few proofs of the intermediate results since, taken in their totality, they are the skeleton of the proof of Theorem 6. The articulation of this skeleton is indicated by the following scheme of dependences of theorems and lemmas.

T1	on	L1, L2.
T2	on	L3, L4.
T3	on	T1, L4.
T4	on	T2.
T5	on	T1.
T6	on	T1, T3, T4, T5.

Let P be the set of probability n-vectors in Euclidean n-space R^n for some integer $n \geqq 2$ fixed throughout the discussion. P^0 is the set of componentwise positive probability n-vectors and $\partial P = P - P^0$. Let Γ be a symmetric entrywise nonnegative n-by-n matrix and de-