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**Section:**

**8. Analysis**

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**Kuiper and Dixmier-Douady theorems for C*-Hilbert modules and K-theory**

Let $A$ be a $\sigma$-unital C*-algebra, $l_2(A)$ be the standard C*-Hilbert $A$-module, $GL(A)$ and $GL^*(A)$ be the groups of bounded $A$-isomorphisms and bounded $A$-isomorphisms admitting an adjoint, respectively. Considering them as left and two-sided multipliers of $A$-compact operators on $l_2(A)$ we can introduce the corresponding left strict topology. First we get a simple proof of the Cuntz-Higson theorem on the norm contractibility of $GL^*(A)$. We prove the norm contractibility of $GL(A)$ for some classes of algebras (e. g., $A \subset K(H)$, $A = C_0(M)$, where $M$ is finite dimensional). We prove some generalizations of the Dixmier-Douady theorem to the left strict topology. Then we apply the results in K-theory.