1063-46-243 **Alexander A. Katz*** (katza@stjohns.edu), St. John's University, Department of Mathematics & Computer Science, 300 Howard Ave., DaSilva Academic Center 314, Staten Island, NY 10301.
On real $\mathbb{B}$-C^*-algebras.

Let A be a real C^*-algebra, and $\mathbb{B}$ be a complete Boolean subalgebra of the Boolean algebra of all central projections of A. We call A a real $\mathbb{B}$-C^*-algebra, if for each partition of unity $(e_\lambda)_{\lambda\in\Lambda} \in \mathbb{B}$, and each family $(x_\lambda)_{\lambda\in\Lambda} \in A$, there exists a unique $\mathbb{B}$-mixing $mix_{\lambda\in\Lambda}(e_\lambda x_\lambda)$, i.e. a unique $x \in A$ such that $e_\lambda x_\lambda = e_\lambda x$ for all $\lambda \in \Lambda$. Let now $\mathbb{V}^{(\mathbb{B})}$ be a Boolean valued universe. Among other basic properties of real $\mathbb{B}$-C^*-algebras it is established that a bounded descent of a real C^*-algebra inside $\mathbb{V}^{(\mathbb{B})}$ is a real $\mathbb{B}$-C^*-algebra. Conversely, it is shown that for every real $\mathbb{B}$-C^*-algebra A there exists a unique (up to a real *-isomorphism) real C^*-algebra $\mathcal{A}$ inside $\mathbb{V}^{(\mathbb{B})}$ whose bounded descent is isometrically real *- $\mathbb{B}$-isomorphic to A. (Received August 17, 2010)