1042-46-176 **Antonio Jimenez-Vargas**, Departamento de Algebra y Analisis Matematico, Universidad de Almeria, 04120 Almeria, Spain, **Aaron Luttman*** (aluttman@clarkson.edu), Box 5815, Division of Mathematics and Computer Science, Clarkson University, Potsdam, NY 13699, and **Moises Villegas-Vallecillos**, Departamento de Algebra y Analisis Matematico, Universidad de Almeria, 04120 Almeria, Spain. *A Spectrum-type Preserver Problem on Pointed Lipschitz Algebras.*

Let (X, d) be a compact metric space with a distinguished base point x_0, and let $Lip_0(X)$ be the Banach algebra of all scalar-valued Lipschitz functions f on X such that $f(x_0) = 0$, with the norm

$$L(f) = \sup \{|f(x) - f(y)| / d(x, y) \colon x, y \in X,\ x \neq y\}.$$

Let $\mathrm{Ran}_\pi(f) = \{f(x) \colon x \in X,\ |f(x)| = \|f\|_\infty\}$ denote the peripheral range of f. We prove that if $\Phi \colon Lip_0(X) \to Lip_0(Y)$ is a surjective map, not assumed to be linear, with the property that $\mathrm{Ran}_\pi(fg) \cap \mathrm{Ran}_\pi(\Phi(f)\Phi(g)) \neq \emptyset$ for all $f, g \in Lip_0(X)$, then Φ is a weighted composition operator of the form

$$\Phi(f)(y) = \tau(y) f(\varphi(y)), \quad \forall f \in Lip_0(X),\ \forall y \in Y,$$

where τ is a function from Y into $\{-1, 1\}$ and φ is a Lipschitz homeomorphism from Y onto X such that $\varphi(y_0) = x_0$. (Received August 18, 2008)