1070-46-185 **T. Tonev*** (tonevtv@mso.umt.edu), The University of Montana, Missoula, MT 59803.
Composition operators between subsets of function algebras.

This talk is based on a joint paper with E. Toneva. We expand the Banach-Stone theorem for non-linear isometries and also to non-unital function algebras. Let A and B be function algebras and A_1 be a dense subset of A. If $T\colon A_1 \to B$ is an isometry with a dense range, such that $\big\||Tf| + |Tg|\big\| = \big\||f| + |g|\big\|$ for all $f, g \in A$, and $T(ih_0) = i\,(Th_0)$, where $h_0 \in A_1$ does not vanish on the Choquet boundary δA of A, then T is a weighted composition operator on δB, i.e. there is a homeomorphism $\psi\colon \delta B \to \delta A$ and a continuous function $\alpha\colon \delta B \to \mathbb{C}$ so that $(Tf)(y) = \alpha(y)\, f\big(\psi(y)\big)$ for all $f \in A_1$ and $y \in \delta B$. If, in addition, A_1 is an algebra, then so is $\overline{\alpha}\, T(A_1)$ and $\overline{\alpha}\cdot T\colon A_1 \to \overline{\alpha}\, T(A_1)$ is an isometric algebra isomorphism. We show also that if A and B are function algebras, A_1 is a dense subset of A and $T\colon A_1 \to B$ is an isometry with a dense range in B such that $\big\||Tf| + |Tg|\big\| = \big\||f| + |g|\big\|$ for all $f, g \in A_1$ and preserves the peripheral spectra, then δB is homeomorphic to δA and T is a composition operator on δB. (Received February 10, 2011)