



Thomas Tonev, The University of Montana, Missoula, *Non-linear conditions for composition operators between function algebras.*

ABSTRACT. Two types of non-linear conditions for maps between function algebras, not necessarily uniformly closed nor unital, to be weighted composition operators will be presented: of multiplicative type, in terms of the *peripheral spectra* $\sigma_\pi(f)$, and of additive type, in terms of the *sup-norms* (or the spectral radii) $\|f\|_\infty$ of algebra elements f . The latter lead to non-linear versions of classical Banach-Stone's theorem. As a consequence we obtain non-linear conditions for isomorphisms between Banach algebras associated with locally compact groups.