COMPLEX ANALYSIS SEMINAR

GENERATORS FOR ALGEBRAS DENSE IN L^p SPACES

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ABSTRACT: For various L^p-spaces ($1 \leq p < \infty$) we investigate the minimum number of complex-valued functions needed to generate an algebra dense in the space. The results depend crucially on the regularity imposed on the generators. For μ a positive regular Borel measure on a compact Hausdorff space there always exists a single bounded measurable function that generates an algebra dense in $L^p(\mu)$. However, the situation is very different when the generators are required to be continuous or smooth. The most interesting case turns out to be that of continuous generators. This is joint work with Bo Li.

Date: Thursday, December 6, 2012

Time: 4pm-5pm

Place: UH 4100A

Webpage: `http://math.utoledo.edu/~ssahuto/complexseminar.html`