



Analysis Seminar

Title: A strong form of Plessner's theorem II

Speaker: Stephrn Gardiner

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Abstract: Let f be a holomorphic, or even meromorphic, function on the unit disc. Plessner's theorem then says that, for almost every boundary point ζ , either (i) f has a finite nontangential limit at ζ , or (ii) the image $f(S)$ of any Stolz angle S at ζ is dense in the complex plane. This paper shows that statement (ii) can be replaced by a much stronger assertion. This new theorem and its analogue for harmonic functions on halfspaces also strengthen classical results of Spencer, Stein and Carleson.

(This is joint work with Myrto Manolaki.)