1161-30-214 Stephen J. Gardiner and Myrto Manolaki* (myrto.manolaki@ucd.ie). A strong form of Plessner's theorem.

Let f be a meromorphic function on the unit disc. Plessner's theorem says that, for almost every point ζ on the unit circle, 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. In this talk, we will see that condition (ii) can be replaced by a much stronger assertion. Our new theorem and its harmonic analogue on halfspaces also strengthen classical results of Spencer, Stein and Carleson. Finally, we will discuss an application to the theory of universal approximation. (Received August 17, 2020)