962-30-629 **P C Fenton**, Department of Mathematics Dunedin, New Zealand, and **John F Rossi*** (rossi@math.vt.edu), Department of Mathematics, Blacksburg, VA 24061. *Hayman Directions for Meromorphic Functions.*

Suppose that f is a meromorphic function satisfying

$$\limsup_{|z|\to\infty} |z|\rho(|z|, f)/\log|z| = \infty,$$

where $\rho(|z|, f)$ is the supremum of the spherical derivative of f on the circle of radius $|z|$. Complementing a theorem of Yang, we prove that there is a number $\theta \in [0, 2\pi)$, called a *Hayman direction*, such that, in any Stoltz angle around θ, either f takes all values infinitely often or else every derivative of f takes all complex values, except possibly zero, infinitely often. The class of transcendental entire functions is covered by the hypotheses. (Received September 18, 2000)