1093-35-307 **Federico Tournier\*** (fedeleti@aol.com), calle 18 numero 3068, 1897 M.B. Gonnet, Bs As, Argentina. Global second derivative estimate for the parallel refractor problema.

This work is concerned with the estimation of the second derivatives up to the boundary for the refractor problem. We treat the near field case when rays emanate in parallel fashion. We find conditions on the domain  $\Omega$ , the target hypersurface  $\Sigma$  and its projection  $\Omega^*$  that guarantee that a global smooth refractor satisfies an initial condition of oblique type. (Received August 19, 2013)