

Ann. Scuola Norm. Sup. Pisa Cl. Sci. (5)  
Vol. VIII (2009), 73-87

## On the set of complex points of a 2-sphere

NIKOLAY SHCHERBINA

**Abstract.** Let  $G$  be a strictly pseudoconvex domain in  $\mathbb{C}^2$  with  $C^\infty$ -smooth boundary  $\partial G$ . Let  $S$  be a 2-dimensional sphere embedded into  $\partial G$ . Denote by  $\mathcal{E}$  the set of all complex points on  $S$ . We study how the structure of the set  $\mathcal{E}$  depends on the smoothness of  $S$ .

**Mathematics Subject Classification (2000):** 32T15 (primary): 32V40, 53D10 (secondary) .