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*On the Dirichlet problem for functions of the first Baire class*

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**Abstract:** Let  $\mathcal{H}$  be a simplicial function space on a metric compact space  $X$ . Then the Choquet boundary  $ChX$  of  $\mathcal{H}$  is an  $F_\sigma$ -set if and only if given any bounded Baire-one function  $f$  on  $ChX$  there is an  $\mathcal{H}$ -affine bounded Baire-one function  $h$  on  $X$  such that  $h = f$  on  $ChX$ . This theorem yields an answer to a problem of F. Jellet from [8] in the case of a metrizable set  $X$ .

**Keywords:** weak Dirichlet problem, function space, Choquet simplexes, Baire-one functions

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