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Khavinson**. *Analytic functions in Smirnov classes E^p with real boundary values.*

Let G be a domain bounded by Jordan rectifiable curves C_1, \dots, C_n . It is well known that for $p \geq 1$ analytic functions in E^p -classes can be represented as Cauchy integrals of their non-tangential boundary values. If all of the boundary curves are analytic then $E^p(G) = H^p(G)$ and any analytic function in Smirnov class E^p with real boundary values is a constant. However, there are non-smooth boundaries that do admit non-constant analytic functions of Smirnov class with real boundary values. We will discuss the particular boundary characteristics that are sufficient for such functions to exist. (Received December 13, 2011)