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**On Sparse Sets with the Green Function  
of the Highest Smoothness**

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**Abstract.** Let  $E$  be a regular compact subset of the real line, let  $g_{\overline{\mathbb{C}} \setminus E}(z, \infty)$  be the Green function of the complement of  $E$  with respect to the extended complex plane  $\overline{\mathbb{C}}$  with pole at  $\infty$ . We construct two examples of sets  $E$  of the minimum Hausdorff dimension with  $g_{\overline{\mathbb{C}} \setminus E}$  satisfying the Hölder condition with  $p = 1/2$  either uniformly or locally.

**Keywords.** Green's function, compact set, Hausdorff dimension, conformal invariants.

**2000 MSC.** Primary 30C10, 30C15, 41A10.

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