

**THE POISSON PROBLEM IN A DOMAIN
WITH A CUT***Yu. N. Subbotin and N. I. Chernykh*

With the help of harmonic wavelets, we study the behavior of solutions to the Poisson problem in an elliptic ring when the interior bound shrinks to a segment. It is demonstrated that only partial derivatives of a solution have unbounded singularities near the ends of this segment.

Key words and phrases: harmonic wavelets, elliptic ring, Laplace operator, Poisson boundary value problem.

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