

Aproksimacija i ocjena funkcija na osnovu lokalnih podataka

Ivan Veselić

Tehničko Sveučilište, Chemnitz, Njemačka

Sažetak

In many areas of mathematics and its application in other sciences one is confronted with the task of estimating or reconstructing a function based on partial local data. Of course, this will not work for all functions well. Thus one needs an restriction to an adequate class of functions. This can be mathematically modeled in many ways. Spacial statistics or complex function theory are relevant areas of mathematics which come to ones mind.

We present several results on reconstruction and estimation of functions which are solutions of elliptic partial differential equations on some subset of Euclidean space. We comment also on analogous statements for functions with localized Fourier transform.