Obituary for Guenter Meinardus

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Guenter Meinardus died on June 11, 2007 in Neustadt/ Weinstrasse after
having suffered from a severe disease for a long time.

Guenter Meinardus was born on June 11, 1926 in Bremen, Germany. He went to
study Mathematics and Physics at the Universities of Goettingen and
Heidelberg. Under the supervision of C. L. Siegel he received his doctoral
degree from the University of Goettingen in 1953. His dissertation was
concerned with algebraic number theory.

Strongly influenced by Lothar Collatz his interests concentrated on
approximation theory and related topics. After his Habilitation at the
University of Hamburg in 1959 he was offered a Chair of Mathematics at the
Technical University of Clausthal-Zellerfeld in 1964.

In 1968, Guenter Meinardus joined the University of Erlangen-Nuernberg and
in 1974 the University of Siegen. In 1980 he went to the University of
Mannheim where he taught until his retirement, in 1991.

The principal mathematical interests of GA~¼nter Meinardus were in the
subject of Approximation Theory. He wrote the classical monograph
"Approximation of Functions: Theory and Applications".

Guenter Meinardus has had considerable influence on the theory of nonlinear
approximation of functions. Within this area his main interest was directed
towards asymptotic results on rational approximation, especially on the
asymptotic behaviour of the minimal deviations to the exponential function.
This leads to the famous "1/9"- problem, finally solved with potential
theoretical methods. He stimulated the application of rational
approximations on unbounded intervals for the heat equation. This
fundamental view was the starting point for investigations of approximations
on unbounded domains where segment approximations also play an important
role. His constructive contribution to nonlinear approximations culminated
in the introduction of asymptotically convex systems which has lead to
generalizations of the local and global Kolmogoroff-criterions and also to
alternation characterizations in the spirit of Chebyshev.

Guenter Meinardus also published many significant papers dealing with
various aspects of spline functions. He developed complex integral
representations of B-splines and gave estimates for the Chebyshev norm of
these splines. Several papers were concerned with bounds of the norms of
spline interpolation operators. Fundamental results were obtained for
different classes of spline functions. He also considered piecewise
polynomial approximation for functions in one and in two variables and
developed algorithms for the computation of the best approximations.

Guenter Meinardus organized many international conferences on Approximation
Theory and was asked to join the founding editorial board of the Journal of
Approximation Theory in 1968, remaining an editor until 1991. He was elected
member of the Oberwolfach committee and of the German Academy Leopoldina. He

was guest professor at many universities and had contact to several prominent colleagues. The Approximation Theory community has lost an eminent representative.

Guenter Meinardus will be badly missed by all his colleagues and friends.