

Mathematics Colloquium

On Carleson Measures

Ruhan Zhao

Department of Mathematics
College at Brockport
State University of New York

Friday, May 31, 2019
4:10 – 5:00 p.m.
Building 53 Room 201

Abstract

The Carleson measure was introduced by L. Carleson in 1962 for studying the problem of interpolation by bounded analytic functions and for solving the famous corona problem. Later mathematicians found that the Carleson measure is a very useful tool in many problems in function space theory and operator theory. Variations of the Carleson measure have also been introduced and studied. In this survey we report some classical and recent results on Carleson measures related to Hardy spaces and show various applications of these results.

About the speaker: Ruhan Zhao is a mathematics professor at College at Brockport, State University of New York. He obtained his Ph.D. in mathematics at University of Joensuu (now University of Eastern Finland) in 1996. In 1998-99, he held a post-doctoral fellowship at Kyoto University, sponsored by the Japanese Society of Promotion of Science (JSPS). He has published over 60 research papers on spaces of analytic functions and operator theory in journals such as Math. Ann., Trans. Amer. Math. Soc., Proc. Amer. Math. Soc., Indiana Univ. Math. J., Michigan Math. J., Pacific J. Math., J. London Math. Soc., etc. In 1995 he introduced the Q_p spaces with his coauthors, Rauno Aulaskari and Jie Xiao. In 1996 he introduced $F(p,q,s)$ spaces. The Q_p spaces and the $F(p,q,s)$ spaces have been extensively studied by mathematicians all over the world since they were introduced. In 2010 Mathematics Subject Classification (MSC) it assigned Q_p spaces a classification number, 30H25. Dr. Zhao is also a science fiction writer who published dozens of science fiction stories in China.

Cookies will be provided before the talk at 4 p.m.
in the same room as the talk, Building 53 Room 201.