Asymptotics of solutions to the second Painlevé hierarchy

01.10 **Weiying Hu**
(*Department of Mathematics, City University of Hong Kong*)
Time: Thursday 25.07., 11:00 - 11:30, Room AM

Abstract: In this talk I will introduce the asymptotics of Hastings-McLeod solutions and Ablowitz-Segur solutions as $x \to \pm\infty$ for any α, the parameter appears in the equations. Moreover, the connection formulas for the Ablowitz-Segur solutions as $x \to \pm\infty$ are also derived. The method I use is the Deift and Zhou nonlinear steepest descent approach based on Riemann-Hilbert problem.