Weights related to the Freud weight

YU-QIU ZHAO Sun Yat-sen University Email: stszyq@mail.sysu.edu.cn

We discuss several questions on the asymptotic analysis of orthogonal polynomials, with weights colsely related to the Freud weight. One question arises when a connection formula for Heun's equation is dealt with. Another is on the limiting zero distribution of the orthogonal polynomials with respect to an oscillating Bessel weight, being involved in certain quadrature formulas.