学术报告

Eulerian Numbers, Eulerian Polynomials, and B-Splines and Their Generalizations and Applications in Numerical Analysis

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Venue：Room 108, Center for Applied Mathematics

Abstract ： We present the interrelationships between Eulerian polynomials and Euler-Frobenius polynomials, Eulerian numbers and discrete B-splines, Eulerian fractions and Euler-Frobenius fractions. Those discovered connections are used to develop their properties efficiently. The applications in spline image interpolation, wavelet analysis, and the evaluation of Riemann zeta function values at odd integers are discussed. We also extend the Eulerian numbers, Eulerian polynomials, and Eulerian fractions to the complex orders and present their applications to the polylogarithm functions. Some recent works on the q-analogues of B-splines, Eulerian numbers, and Eulerian-Frobenius polynomials by Disibuyuk and Ulutas and generalized Eulerian numbers of different kinds by Rzadkowski and Urlinska are introduced. Some open problems are presented.

欢迎大家参加！