

Some identities of special numbers and polynomials arising from p -adic integrals on Z_p

Dae San Kim¹, Han Young Kim², Sung-Soo Pyo³, Taekyun Kim⁴

Abstract

In recent years, studying degenerate versions of various special polynomials and numbers have attracted many mathematicians. Here we introduce degenerate type 2 Bernoulli polynomials, fully degenerate type 2 Bernoulli polynomials and degenerate type 2 Euler polynomials, and their corresponding numbers, as degenerate and type 2 versions of Bernoulli and Euler numbers.

Regarding to those polynomials and numbers, we derive some identities, distribution relations, Witt type formulas and analogues for the Bernoulli's interpretation of powers of the first m positive integers in terms of Bernoulli polynomials. The present study was done by using the bosonic and fermionic p -adic integrals on Z_p .

1. Department of Mathematics, Sogang University, Seoul 04107, Republic of Korea (Email : dskim@sogang.ac.kr)
2. Department of Mathematics, Kwangwoon University, Seoul 01897, Republic of Korea (Email : gksdud213@gmail.com)
3. Department of Mathematics Education, Silla University, Busan 46958, Republic of Korea (Email : ssoopyo@gmail.com)
4. Department of Mathematics, Kwangwoon University, Seoul 01897, Republic of Korea (Email : tkkim@kw.ac.kr)

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