Part II of Computing Determinants Involving Stirling Numbers

Tewodros AMDEBERHAN and Shalosh B. EKHAD

Using the Jacobi-Trudi formula mentioned in Theorem 2 in Part I (Eq. (I.3.5) in [M], p.4.1) we computed explicit expressions for $\beta_n(a, b)$, as well as the explicit generating functions $\sum_{n=0}^{\infty} \beta_n(a, b)q^n$ (that are always rational functions of q). for **all** $10 \ge n \ge a \ge b \ge 0$.

The output file is

https://sites.math.rutgers.edu/~zeilberg/tokhniot/oStirlingDet1.txt

It was generated by executing the command

Paper1(10,n,q):

in the Maple package accompanying this article, that can be gotten from.

https://sites.math.rutgers.edu/~zeilberg/tokhniot/StirlingDet.txt

References

[M] Ian G. Macdonald, "Symmetric Functions and Hall Polynomials", second edition, Clarendon Press, Oxford, 1995.

Shalosh B. Ekhad, c/o D. Zeilberger, Department of Mathematics, Rutgers University (New Brunswick), Hill Center-Busch Campus, 110 Frelinghuysen Rd., Piscataway, NJ 08854-8019, USA. Email: ShaloshBEkhad at gmail dot com .

Doron Zeilberger, Department of Mathematics, Rutgers University (New Brunswick), Hill Center-Busch Campus, 110 Frelinghuysen Rd., Piscataway, NJ 08854-8019, USA. Email: DoronZeil at gmail dot com .