Paper JNSA 205:

Statistics on Graphs, Exponential Formula and Combinatorial Physics

Submitted to JNSA

(http://www.watam.org/JNSA/index.html)

Authors:

- L. Poinsot,
- G. Duchamp,
- S. Goodenough,
- K. Penson

This is a very interesting paper in my opinion. It addresses a tool, borrowed from statistical physics, useful in many contexts : computer science, mathematics or physics. It is the combinatorial formula known as exponential formula which expresses that the exponential generating function of a whole structure is equal to the exponential of those of connected substructures.

Authors develop a general framework to handle many different situations in which the exponential formula can be applied.

Conclusion:

This is a very interesting paper. I have found no errors to point out. Both the subject matter and the scientific level are in line with the style of JNSA.

Therefore, I recommend the paper for publication in JNSA.

Sincerely An anonymous referee January, 2010