

**DEFORMATIONS OF THE SEMICIRCLE LAW DERIVED FROM RANDOM  
WALKS ON FREE GROUPS**

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*Abstract:* New 1-parameter families of central limit distributions are investigated by means of random walks on trees associated with free groups under two kinds of states: one is Haagerup's function and the other is a spherical function associated with unitary representations of the principal series. Those families give rise to deformations of Wigner's semicircle distribution by non-symmetric probability measures.

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**Key words and phrases:** -

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