

**NEW INTERPOLATIONS BETWEEN CLASSICAL AND FREE GAUSSIAN
PROCESSES**

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Abstract: In this paper we present the base of a general technique to derive new positive definite functions on pairings from already known ones. To describe this technique we use two concrete applications. The first one refers to the function depending on the number of connected components, the second one to the function depending on the number of crossings. In the first application we get a new family of functions identifying nontrivial connected components.

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