

1070-60-170

**Adrien Kassel\*** ([adrien.kassel@ens.fr](mailto:adrien.kassel@ens.fr)), 45 rue d'Ulm, 75005 Paris, France. *Geometrical properties of certain determinantal processes.*

We introduce qdeterminantal processes, which are a generalization of determinantal and Pfaffian processes, where the usually complex-valued kernel takes quaternionic values. Our purpose is to give a better description of certain random point processes living on embedded graphs. In this light, we present results on two models: the CRSF (a geometrical generalization of the uniform spanning tree recently introduced by Richard Kenyon), and dimers on bipartite graphs. We also comment on applications to other Pfaffian processes and address the question of sampling. (Received February 09, 2011)