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**Jinho Baik**

**On the Christoffel-Darboux Kernel  
for Random Hermitian Matrices  
with External Source**

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**Abstract.** Bleher & Kuijlaars and Daems & Kuijlaars showed that the correlation functions of the eigenvalues of a random matrix from unitary ensemble with external source can be expressed in terms of the Christoffel-Darboux kernel for multiple orthogonal polynomials. We obtain a representation of this Christoffel-Darboux kernel in terms of the usual orthogonal polynomials.

**Keywords.** Random matrix, external source, orthogonal polynomial.

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