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Boris Hanin* (bhanin@mit.edu) and **Yaiza Canzani** (canzani@math.harvard.edu). *Universal Scaling Asymptotics for Spectral Projector of the Laplacian and Applications to Random Waves.*

Let (M^n, g) be a closed Riemannian manifold of dimension $n \geq 2$. The main result I will present is a new C^∞ off-diagonal remainder estimate in the pointwise Weyl law on (M, g) near a non-self focal point. (A point $x \in M$ is non self-focal if the set of geodesic loops through x has measure 0). A consequence is that the kernel of the spectral projector of the Laplacian $\Pi_{[\lambda, \lambda+1]}$ onto functions with frequencies lying in $[\lambda, \lambda+1]$ has a universal scaling limit around any non self-focal point. This implies that local statistics of monochromatic random waves are universal near a non self-focal point. This is joint work with Y. Canzani. (Received September 17, 2015)