We will discuss a new approach to the study of the edge of spiked beta ensembles. The latter arise e.g. when a GOE/GUE/GSE matrix is perturbed by a low rank deterministic matrix. The limit is described by a Feynman-Kac type semigroup of random operators. Various quantities for the latter can be then computed using tools of stochastic calculus. This is joint work with Pierre Yves Gaudreau Lamarre and is based on some ideas from previous work with Vadim Gorin.