Contribution Title:	DYSON'S BETA ENSEMBLE AND THE BROWNIAN CAROUSEL
Authors:	B. Valko, B. Virag
Presenting author:	Valkó B.
Affilation:	University of Wisconsin - Madison
E-mail:	valko@math.wisc.edu
Invited speaker:	Topical session
YRS seminar:	NO

We derive the point process limits of random eigenvalues in the bulk of the spectrum for the general beta-ensembles of random matrix theory. The limit is described as a simple functional of a Brownian motion in the hyperbolic plane - the Brownian carousel. We use this representation to prove Dyson's prediction for the asymptotic probability of large gaps between beta ensemble eigenvalues.