

ATELIER « SYSTÈMES DÉSORDONNÉS : VERRES DE SPIN »
8–13 JUIN 2009

WORKSHOP “DISORDERED SYSTEMS: SPIN GLASSES”
JUNE 8–13, 2009

Central limit theorem for eigenvalue fluctuations of large random graphs

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We discuss the behavior of fluctuations of linear eigenvalue statistics of adjacency matrices of large random graphs $\Gamma = \Gamma_{N,p}$ under assumptions that the edges of $\Gamma = \Gamma_{N,p}$ are drawn independently and the average number of edges attached to one vertex p does not depend on N . It is shown that for any analytic test function the fluctuation converges in the distribution to the normal random variable.